National Library
of Canada

Bibliothèque nationale
du Canada

Canadian Theses Service

Services des thèses canadiennes

Ottawa, Canada
K1A 0N4

CANADIAN THESES

THÈSES CANADIENNES

NOTICE

The quality of this microfiche is heavily dependent upon the quality of the original thesis submitted for microfilming. Every effort has been made to ensure the highest quality of reproduction possible.

If pages are missing, contact the university which granted the degree.

Some pages may have indistinct print especially if the original pages were typed with a poor typewriter ribbon or if the university sent us an inferior photocopy.

Previously copyrighted materials (journal articles, published tests, etc.) are not filmed.

Reproduction in full or in part of this film is governed by the Canadian Copyright Act, R.S.C. 1970, c. C-30.

AVIS

La qualité de cette microfiche dépend grandement de la qualité de la thèse soumise au microfilmage. Nous avons tout fait pour assurer une qualité supérieure de reproduction.

S'il manque des pages, veuillez communiquer avec l'université qui a conféré le grade.

La qualité d'impression de certaines pages peut laisser à désirer, surtout si les pages originales ont été dactylographiées à l'aide d'un ruban usé ou si l'université nous a fait parvenir une photocopie de qualité inférieure.

Les documents qui font déjà l'objet d'un droit d'auteur (articles de revue, examens publiés, etc.) ne sont pas microfilmés.

La reproduction, même partielle, de ce microfilm est soumise à la Loi canadienne sur le droit d'auteur, SRC 1970, c. C-30.

THIS DISSERTATION
HAS BEEN MICROFILMED
EXACTLY AS RECEIVED

LA THÈSE A ÉTÉ
MICROFILMÉE TELLE QUE
NOUS L'AVONS REÇUE

NL-339 (r.86/06)

Canada

THE UNIVERSITY OF ALBERTA

NURSES' PERCEPTIONS OF INCIDENT REPORTING

by

DARLENE WINSHIP

©

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE
OF
MASTER OF EDUCATION

DEPARTMENT OF EDUCATIONAL ADMINISTRATION

EDMONTON, ALBERTA
SPRING, 1987

Permission has been granted to the National Library of Canada to microfilm this thesis and to lend or sell copies of the film.

The author (copyright owner) has reserved other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without his/her written permission.

L'autorisation a été accordée à la Bibliothèque nationale du Canada de microfilmer cette thèse et de prêter ou de vendre des exemplaires du film.

L'auteur (titulaire du droit d'auteur) se réserve les autres droits de publication; ni la thèse ni de longs extraits de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation écrite.

ISBN 0-315-37835-2

SPRINGHOUSE CORPORATION

April 21, 1987

Ms. Darlene Winship
Royal Alexandra Hospitals
c/o Information Desk
10240 Kingsway Avenue
Edmonton, Alta.
CANADA T5H 3V9

Dear Ms. Winship:

In response to your letter of April 19, 1987, in which you requested permission to reproduce material from our publication on a copier, please be advised you have permission to reproduce up to 100 copies for the use specified (NOT to be printed in another publication).

In addition, we require the following credit line to be completed and to appear on the first page of each copy:

REPRINTED WITH PERMISSION FROM
THE January/February 1982 ISSUE OF
NURSINGlife COPYRIGHT© 1982
SPRINGHOUSE CORPORATION
1111 Bethlehem Pike
Springhouse, PA. 19477
ALL RIGHTS RESERVED.

Thank you for your interest in our publications.

Yours,

B.C. Mayer

Brenda C. Mayer
Reprints/Permissions

Affiliates
Springhouse Book Company
Springhouse Financial Corporation
Springhouse Realty Company
Nurses Service Organization
The Nursing Institute
The Learning Institute

Publications
Nursing magazine
NursingLife magazine
Learning magazine
CareerDirectory
Nursing Skillbook series
Nurse's Reference Library
NursePac
Nursing Photobook series
Nurse's Clinical Library
Nursing Now series
Nursing Drug Handbook

1111 BETHLEHEM PIKE
SPRINGHOUSE, PA 19477
(215) 646-8700
TELEX #510 661 0050

Credit must include the following:
- Title of book or journal
- Name(s) of author(s) and/or editor(s)
- Copyright notice, including:
  - the word copyright
  - the symbol ©
  - the copyright year
  - the name of the copyright owner
- Reprinted by permission of John Wiley & Sons, Inc.

Darlene Winship
4808-116 St.
Edmonton, Alberta
Canada T6H-3R1

April 19, 1987

__To__: Constance Scarborough

__From__: Darlene Winship

__Re__: Telephone Conversation April 16, 1987 with Dr. Abram Konrad regarding copyright authorization for use of attached Figure in Masters thesis for Faculty of Education, Department of Educational Administration, University of Alberta, Edmonton, Alberta, Canada.

__Title of Thesis__: Nurses' Perceptions of Incident Reporting.

__Source__ -- Simms, L.M. The Professional Practice of Nursing Administration.
Figure 2.3 entitled "The Organization Universe Model"

Dear Constance,

Dr. Konrad has indicated that you have verbally agreed to my including the attached figure in my thesis. Prior to acceptance by the Faculty of Graduate Studies and Research I require written authorization to do so. Would you be able to forward the same to me as soon as possible? The deadline is April 22, 1987.

Thank you for your cooperation and assistance.

Sincerely,

Darlene Winship

Darlene Winship

Constance,
Will you please send return response C.O.D. by Purolater? Address to:

Darlene Winship
Royal Alexandra Hospitals
c/o Information Desk.
10240 Kingsway Avenue.
Edmonton, Alberta
Canada T5H 3V9

APR 22 1987

Permission granted.
Credit must be given to
our work and its copyright.

Constance Scarborough
For Teresa Hartnett
Permissions Manager
John Wiley & Sons, Inc.

If material appears in our book with credit given to another source, authorization from that source is required.

APR 22 1987

American Hospital Publishing, Inc.

AHA

211 East Chicago Avenue
Chicago, Illinois 60611
Telephone 312.440.6800

NAME AND ADDRESS OF PERSON MAKING REQUEST: **Darlene Winship, ROYAL ALEXANDRA HOSPITALS, c/o Information Desk, 10240 Kingsway Avenue**
Edmonton, Alberta, Canada T5H 3V9

The undersigned requests permission to reproduce material from:

TitleChart: **Fault Tree Analysis from article "Positive Use of Incident Reports"**

Author: **Gladys Duran**

Published in: HOSPITALS, Vol. 53, No. 14, pg. 68 Date: July 16, 1979

I. This material will be reproduced in the following way:

1. Reprinted in a work entitled:

   Written by:

   To be published by:

   Estimated publication date and/or edition:

2. Reproduced as freestanding material

   To be distributed free/at cost/as part of a registration fee/at a charge of __________ per copy.

3. Number of copies: Intended use: In connection with thesis.

II. When material is produced, one copy will be sent to American Hospital Publishing, Inc., Office of the Publisher.

III. A fee of $ 10.00 will be paid for release of copyright. A check in this amount made out to American Hospital Publishing, Inc., will accompany one signed copy of this agreement when returned to the undersigned.

IV. In addition to the stipulations above, the undersigned agrees to the following additional stipulations that apply to reprints of AHPI material:

1. Consent of the author(s) will be obtained by applicant (except when author is an AHPI staff member).

(over)

American Hospital Publishing, Inc., is a wholly owned subsidiary of the American Hospital Association.

2. The following credit line, including copyright notice, will appear on the first page of reprinted material:

   Reprinted by permission from HOSPITALS, Vol. 53, No. 14, July 16, 1979. Copyright 1979, American Hospital Association.

3. No writing or printing other than the credit line may appear, except that the credit line may be followed by a comma, the word by and the name of the requester producing the reprint.

4. Reproduction will follow text exactly. No changes, deletions, or additions will be made without specific permission.

5. No advertising matter may be attached. Any advertising appearing on the same page as the text to be photocopied must be covered or cut out before photocopying the text. In such an instance, the text columns may also be rearranged.

V. The permission granted here applies only to the edition of the book specified herein or to the freestanding copies used for the purpose specified herein.

This permission does not include any grant of copyright matter obtained by American Hospital Publishing, Inc., from other sources and incorporated in the material specified.

No rights other than the reprint of the specified material are conveyed in this permission agreement. The undersigned agrees to use the reproduced material only for the purpose(s) specified herein and will not use the reproduced material for any other purpose, commercial or otherwise, will not provide copies to any other person or entity absent the express written permission of AHPI, and will not cause such material to be used in a manner inconsistent with the terms of this agreement.

This letter, when received by American Hospital Publishing, Inc., with both signatures and accompanied by the specified fee, serves as a contract setting the terms on which the material may be used.

Accepted:

AMERICAN HOSPITAL PUBLISHING, INC.

By: Carole J Rebells

Date: April 21, 1987

APPLICANT

Darlene Windup
4808-116 Street, Edmonton, Alta
Canada T6H 3R1

Date: May 20/87

THE UNIVERSITY OF ALBERTA

RELEASE FORM

NAME OF AUTHOR: DARLENE SANDRA WINSHIP

TITLE OF THESIS: NURSES' PERCEPTIONS OF INCIDENT REPORTING

DEGREE: MASTER OF EDUCATION

YEAR THIS DEGREE GRANTED: 1987

Permission is hereby granted to THE UNIVERSITY OF ALBERTA LIBRARY to reproduce single copies of this thesis and to lend or sell such copies for private, scholarly or scientific research purposes only.

The author reserves other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without the author's written permission.

Darlene Winship

4808-116 Street
Edmonton, Alberta
T6H-3R1

Date: April 17, 1987

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled Nurses' Perceptions of Incident Reporting submitted by Darlene S. Winship in partial fulfillment of the requirements for the degree of Master of Education in Educational Administration.

Konrad
Supervisor

Forrest

John E Seger

Date: March 5, 1987.

To Bruce--

whose love allowed the
opportunity to undertake this
challenge.

Abstract

NURSES' PERCEPTIONS OF INCIDENT REPORTING

The purpose of the research was to describe nurses' perceptions of incident reporting and to ascertain personal and professional variables influencing their perceptions. The study surveyed staff nurses' and nurse-supervisors' perceptions of the actual and ideal purposes of incident reporting, situations requiring incident reporting, guidelines for incident reporting, actual and ideal processing of incident reports, factors influencing incident reporting, and overall perceptions of incident reporting.

Interviews were conducted with the Director of Nursing and Quality Assurance Coordinator to determine the organization and nature of incident reporting in the hospital. The interviewees expressed general satisfaction with the overall incident reporting and data processing systems, although the systems did not meet the standards of the ideal risk management program.

The questionnaire, developed by the researcher, was distributed to a random group of 213 staff nurses and nurse-supervisors on medical, surgical, and intensive care areas in an active treatment, urban general hospital. The return rate was 74.2 percent.

Means and percentage distributions were used to describe the nurses' responses to the items in the questionnaire. A t-test analysis determined that significant differences existed between the actual and ideal means for purposes and processing for incident reports. Analysis of variance and Chi Square analysis were used to determine which demographic variables significantly differentiated nurses' perceptions of purposes, situations, guidelines, processing, influencing factors, and overall ratings of incident reporting. In this study, the significant relationships between the independent and dependent variables tended to be unpredictable and minimal.

Nurses' satisfaction with incident reporting was rated as average to extremely low. Although most nurses perceived incident reporting as important to ensuring a safe patient environment, most perceived average improvement in the quality of patient care and nursing practice as a result of incident reporting.

Based on the findings, recommendations were developed that focused upon revising policy, guidelines, and processing related to incident reporting. Based upon deficiencies in nurses' overall understanding of the relationship between risk management, legalities and quality assurance in patient care, a curriculum design for an education program was recommended.

ACKNOWLEDGMENTS

Though they must remain anonymous, I wish to recognize and express sincere appreciation to the Director of Nursing, Quality Assurance Coordinator, nurse-supervisors, and staff nurses, who through their participation in the study gave me the opportunity to research and learn from doing so. The comments and practical suggestions of those nurse-experts who assisted in refining the research design and instrument, and of those nurses who participated in the pilot of the research instrument, gave valuable consultation in the development of the study.

I am deeply indebted to Dr. Abram Konrad for offering his scholastic and research expertise, stimulating encouragement, patience, and sense of humor in the development and review of the thesis. Many aspects of this document reflect his characteristically thorough and exhaustive expectations and contributions.

Appreciation is extended to my mentor, Dr. Darle Forrest, who caused me to continually focus, reflect, and question while preparing and writing this document. Her thought-provoking questions, discipline, and enthusiasm contributed to the quality and completion of the study.

Dr. E. Seger was instrumental in the development of my

research proposal. His criticisms and valuable advice made this study viable. I am grateful for his contributions in this learning experience.

Mr. R. McNabb lent his artistic expertise to the development of the conceptual framework. Mrs. Chris Prokop gave valuable consultation regarding the statistical aspects of the study. Mrs. Merle Martin gave excellent service in typing the tables, figures, and other segments of this document.

Throughout this research experience I was helped by the encouragement of many friends, colleagues, fellow students, and my professors. My family's love and support gave me discipline and inspiration.

Finally sincere appreciation is extended to Bruce, my husband, who spent endless hours typing and editing this document. This completed document is also a result of his dedication.

TABLE OF CONTENTS

CHAPTER PAGE

1. INTRODUCTION, STATEMENT OF THE PROBLEM AND ITS SIGNIFICANCE........................ 1

    Introduction........................... 1

    Statement of the Purpose.............. 6

    Statement of the Research Problem..... 6

    Definitions............................ 8

    Significance of the Study............. 10

    Delimitations.......................... 10

    Limitations............................ 10

    Assumptions............................ 11

    Organization of the Thesis............ 11

    Summary................................ 12

2. RELATED LITERATURE AND RESEARCH.......... 13

    Terminology............................ 13

    Purposes of Incident Reporting Policy.................................. 16

    Situations Requiring Incident Reporting................................ 19

        Sources of Liability............... 23

        Common Acts of Negligence.......... 25

        Causation Theory................... 31

    Guidelines to Incident Reporting...... 32

    The Processing of Incident Reports.... 43

        The Incident Reporting Process..... 44

        Risk Management.................... 51

        Quality Assurance.................. 56

CHAPTER PAGE

Factors Influencing Incident Reporting.............................. 57

Review of Related Research............ 61

Administration.................... 61

Nursing Practice.................. 64

Conceptual Framework.................. 70

Summary............................... 77

3. RESEARCH DESIGN, METHODOLOGY, AND PROFILE OF RESPONDENTS.......................... 80

Research Design....................... 80

The Research Instrument............ 81

Research Methodology.................. 87

Data Processing....................... 89

Findings for Personal, Professional, and Situational Variables............. 92

Personal and Professional Variables........................ 92

The Hospital Setting.............. 104

Summary............................... 107

4. INCIDENT REPORTING IN THE HOSPITAL AND NURSES' PERCEPTIONS OF INCIDENT REPORTING.............................. 109

Incident Reporting in the Hospital.... 109

Sub-Problem 1......................... 109

Nurses' Perceptions of Incident Reporting.............................. 120

Sub-Problem 2......................... 120

Sub-Problem 3......................... 125

Sub-Problem 4......................... 133

CHAPTER PAGE

Sub-Problem 5........................ 136

Sub-Problem 6........................ 142

Sub-Problem 7........................ 150

Comment Summary...................... 153

Summary.............................. 155

5. THE RELATIONSHIP OF PERSONAL AND PROFESSIONAL VARIABLES TO NURSES' PERCEPTIONS OF INCIDENT REPORTING....... 159

Actual and Ideal Purposes of Incident Reporting.......................... 160

Sub-Problem 8..................... 161

Situations Requiring Incident Reporting.......................... 170

Sub-Problem 9..................... 170

Guidelines for Incident Reporting..... 180

Sub-Problem 10.................... 180

Processing of Incident Reports........ 185

Sub-Problem 11.................... 185

Factors Influencing Incident Reporting.......................... 192

Sub-Problem 12.................... 192

Overall Perceptions of Incident Reporting.......................... 201

Sub-Problem 13.................... 201

Summary.............................. 207

6. SUMMARY, CONCLUSIONS, AND IMPLICATIONS... 211

Overview of the Research.............. 211

Background and Purpose............ 211

PAGE

Methodology........................ 213

Summary of Findings........................ 215

Demographic Data........................ 215

Interview Data........................ 216

Nurses' Perceptions........................ 219

Conclusions........................ 227

Implications........................ 233

Nursing Practice........................ 233

Nursing Administration............. 235

Research........................ 239

REFERENCES........................ 240

APPENDIX A. The "Oops" Report............... 250

APPENDIX B. Questionnaire.................. 252

APPENDIX C. Interview Schedule for Director of Nursing and Quality Assurance Coordinator.................... 268

APPENDIX D. Correspondence Regarding Interview...................... 270

APPENDIX E. Correspondence to Director of Nursing Regarding Permission to Conduct Study.................... 272

APPENDIX F. Corresponence to Unit Supervisor/Assistant Director of Nursing Regarding Permission to Conduct Study.................. 274

APPENDIX G. Cover Letter To Respondents Regarding Participation in Study.. 276

APPENDIX H. Follow-up Correspondence to Respondents..................... 278

APPENDIX I. Incident Reporting Policy....... 281

APPENDIX J. Incident Report Form............ 283

APPENDIX K. Incident Report Code Sheet..... 286

APPENDIX L. Incident Report Summary Form.. 289

LIST OF TABLES

TABLE PAGE

2.1 Cost Factor For Incident Report Completion 38

3.1 Distribution and Return of Questionnaires According to Current Area of Practice 90

3.2 Frequency and Percentage Distribution of Personal and Professional Variables for Staff Nurses and Nurse-Supervisors 95

4.1 Percentage Distribution of Nurses' Perceptions of Actual and Ideal Purposes of Incident Reporting . . . 121

4.2 Analysis of Nurses' Perceptions of Actual and Ideal Purposes of Incident Reporting 124

4.3 Percentage Distribution of Nurses' Perceptions of Medication Situations Requiring Incident Reporting . . 127

4.4 Percentage Distribution of Nurses' Perceptions of Injury Situations Requiring Incident Reporting 128

4.5 Percentage Distribution of Nurses' Perceptions of System Failures Requiring Incident Reporting 130

4.6 Percentage Distribution of Nurses' Perceptions of Guidelines for Incident Reporting 134

4.7 Percentage Distribution of Nurses' Perceptions of Actual and Ideal Processing of Incident Reports . . . 138

4.8 Analysis of Nurses' Perceptions of Actual and Ideal Processing of Incident Reports 140

4.9 Percentage Distribution of Nurses' Perceptions of Factors Influencing Incident Reporting 143

4.10 Percentage Distribution of Overall Perceptions of Incident Reporting 151

5.1 Differences Among Nurses' Perceptions of Actual and Ideal Purposes of Incident Reporting by Age 162

TABLE PAGE

5.2 Differences Between Nurses' Perceptions of Actual and Ideal Purposes of Incident Reporting by Position . . . 162

5.3 Differences Among Nurses' Perceptions of Actual and Ideal Purposes of Incident Reporting by Area 164

5.4 Differences Among Nurses' Perceptions of Actual and Ideal Purposes of Incident Reporting by Years in Area 164

5.5 Differences Among Nurses' Perceptions of Actual and Ideal Purposes of Incident Reporting by Years in Position 165

5.6 Differences Between Nurses' Perceptions of Actual and Ideal Purposes of Incident Reporting by Other Positions Held 165

5.7 Differences Between Nurses' Perceptions of Actual and Ideal Purposes of Incident Reporting by Level of Education 167

5.8 Differences Between Nurses' Perceptions of Actual and Ideal Purposes of Incident Reporting by Professional Score 167

5.9 Differences Among Nurses' Perceptions of Situations Requiring Incident Reporting by Age 171

5.10 Differences Between Nurses' Perceptions of Situations Requiring Incident Reporting by Position 171

5.11 Differences Among Nurses' Perceptions of Situations Requiring Incident Reporting by Area 173

5.12 Differences Among Nurses' Perceptions of Situations Requiring Incident Reporting by Years in Position . . 174

5.13 Differences Among Nurses' Perceptions of Situations Requiring Incident Reporting by Years in Area 174

5.14 Differences Among Nurses' Perceptions of Situations Requiring Incident Reporting by Years in Profession . 176

5.15 Differences Between Nurses' Perceptions of Situations Requiring Incident Reporting by Level of Education . . 177

TABLE PAGE

5.16 Differences Between Nurses' Perceptions of Situations Requiring Incident Reporting by Professional Score . . 177

5.17 Differences Between Nurses' Perceptions of Guidelines for Incident Reporting by Position 181

5.18 Differences Among Nurses' Perceptions of Guidelines for Incident Reporting by Area 181

5.19 Differences Among Nurses' Perceptions of Guidelines for Incident Reporting by Years in Profession 183

5.20 Differences Between Nurses' Perceptions of Guidelines for Incident Reporting by Other Positions Held 183

5.21 Differences Between Nurses' Perceptions of Guidelines for Incident Reporting by Level of Education 183

5.22 Differences Among Nurses' Perceptions of Actual and Ideal Processing of Incident Reports by Age 186

5.23 Differences Between Nurses' Perceptions of Actual and Ideal Processing of Incident Reports by Position . . . 186

5.24 Differences Among Nurses' Perceptions of Actual and Ideal Processing of Incident Reports by Years in Position 188

5.25 Differences Among Nurses' Perceptions of Actual and Ideal Processing of Incident Reports by Years in Area 188

5.26 Differences Among Nurses' Perceptions of Actual and Ideal Processing of Incident Reports by Years in Profession 188

5.27 Differences Between Nurses' Perceptions of Actual and Ideal Processing of Incident Reports by Other Positions Held 189

5.28 Differences Between Nurses' Perceptions of Actual and Ideal Processing of Incident Reports by Professional Score 189

5.29 Differences Among Nurses' Perceptions of Factors Influencing Incident Reporting by Age 193

TABLE PAGE

5.30 Differences Between Nurses' Perceptions of Factors Influencing Incident Reporting by Position 193

5.31 Differences Among Nurses' Perceptions of Factors Influencing Incident Reporting by Area 193

5.32 Differences Among Nurses' Perceptions of Factors Influencing Incident Reporting by Years in Position . 194

5.33 Differences Among Nurses' Perceptions of Factors Influencing Incident Reporting by Years in Area . . . 194

5.34 Differences Among Nurses' Perceptions of Factors Influencing Incident Reporting by Years in Profession 197

5.35 Differences Between Nurses' Perceptions of Factors Influencing Incident Reporting by Other Positions Held 197

5.36 Differences Between Nurses' Perceptions of Factors Influencing Incident Reporting by Professional Score . 198

5.37 Differences Between Nurses' Perceptions of Factors Influencing Incident Reporting by Level of Education . 198

5.38 Differences Among Nurses' Overall Perceptions of Incident Reporting by Age 202

5.39 Differences Between Nurses' Overall Perceptions of Incident Reporting by Position 202

5.40 Differences Among Nurses' Overall Perceptions of Incident Reporting by Years in Position 203

5.41 Differences Among Nurses' Overall Perceptions of Incident Reporting by Years in Area 205

5.42 Differences Among Nurses' Overall Perceptions of Incident Reporting by Years in Profession 205

LIST OF FIGURES

FIGURE		PAGE
2.1	The Incident Reporting Process	45
2.2	Fault Tree Analysis	48
2.3	The Organization Universe Model	71
2.4	A Conceptual Model for Incident Reporting	74
4.1	Incident Report Flow Chart	112

CHAPTER 1

Introduction, Statement of the Problem and Its Significance

Introduction

The metamorphosis of the nursing profession has created an increase in the scope and comprehensiveness of nursing services. Subsequently, there is a concomitant demand for accountability and responsibility in the provision of those services. Nursing is experiencing this demand from the general public, from other health care professionals, and from individuals among its own membership. Because nurses have also come to expect greater autonomy in their daily practice, the nature of their accountability has also changed.

Historically nurses have been protected legally by the physician, who accepted responsibility for dependent nursing actions, and by the hospital, which accepted responsibility for having employed them. The increasing professionalization of nursing has partially removed the legal umbrella that physicians and hospitals once provided; nurses must be accountable and responsible for the consequences of their independent and interdependent nursing functions and actions. Quandries to this scenario lie in the perceptual differences among the nurses, physicians, health care administrators, public, and legal experts regarding the "professional" nature of nursing practice and its associated accountability and responsibility.

Duran (1980) observes that the increased scope and complexity of today's health care delivery systems has caused nurses to assume responsibility for aspects of complex sophisticated patient care regimens. As the nurse becomes involved in and makes a greater number of critical judgments regarding patient care needs the risk of making errors also increases. An injured patient or an unusual occurrence resulting from dependent, independent, or interdependent interventions may bring legal action against not only the nurse, but also against the physician and the hospital. Failure to report injuries or unusual incidents exposes the nurse to certain liability for negligence (Nardecchia and Meyers,1980). Resistance by nurses, for whatever reason, to nursing practice standards, and policies and procedures, is cause for concern to hospital administrators because of potential cost incurred through legal services, increased liability insurance premiums, and the loss of credibility in the public perception.

A contemporary and predominant issue in the health care field is quality assurance. Mappa and Turner (1984) conclude that this is part of a broader trend which gives greater emphasis to the legal rights of the individual. The patient in a hospital assumes the right to some type of assurance of receiving the best care possible. The courts, as well as governments, have been placing greater responsibility upon the hospitals' governing boards to assure high quality patient care.

Recent attention to quality assurance, however, is a direct result of the current mandate of the Canadian Council on Hospital Accreditation (1983:43) which states that:

> There shall be a current written plan describing the organization and implementation of a quality assurance program designed to enhance patient care through the ongoing assessment and correction of identified deficiences.

The delivery of quality patient care has always been a goal of health care professionals and the systems within which they work. In spite of judicial and regulatory requirements patient care and quality have always been interwoven. Most hospitals have some form of quality assurance mechanism in place (Mappa and Turner,1984). What has changed is the context within which health care institutions fulfill this responsibility. The concept of quality assurance, as determined by the Canadian Council on Hospital Accreditation (C.C.H.A.) rests on the institution's ability to validate quality assurance not only through its actions but also through comprehensive documentation of its actions (Mappa and Turner,1984).

In recent years, hospital risk management has evolved (particularly in American hospitals) as an effective program, to manage and minimize the risks of financial loss which may occur in the event of providing patient care in a complex, acute care hospital setting (Barker,1983:iv). The myriad of articles written on risk management closely aligns this management function with quality assurance. Broadly defined, risk management is the identification, remediation, and evaluation of unusual occurrences which may result in financial loss stemming from hospital operations (Duran,1980; Joseph and Jones,1984; and Trendel-Koranchuk,1983). In the literature incident reporting systems are viewed as the cornerstones of hospitals' risk management operations.

Incident reports are records that provide first hand documentation of occurrences which are not in keeping with the hospital's usual practice or quality assurance standards. In the event of litigious action (Duran,1980), incident reports can be valuable in assessing hospital liability, nursing and medical practices, policies and procedures, and quality assurance standards. Ideally, incident reports identify high risk areas ranging from a narrow focus on the technical aspects of competent nursing care to the broader issues of availability, acceptability, and appropriateness of the health care system in meeting the health care needs of the community which it serves. Once problems are identified as deficiencies in patient care, or as risks to patients, staff, visitors and/or the institution, appropriate corrective action may be initiated. Brown (1983,viii) suggests corrective action may include:

1. A change in the overall organizational structure of communication.
2. A change in a technical aspect of patient care.
3. Revisions in nursing care standards.
4. Revisions in quality assurance standards.

5. Re-education and continuing education of nursing and medical staff.

Reduction in risk factors is cost effective quality assurance. Proponents of risk management agree that although risk cannot be eliminated entirely, much hospital and provider liability can be prevented through effective incident reporting systems.

The result of increased opportunities for litigation may be to frighten many nurses (Duran,1979). Compounding this anxiety is a system which offers minimal allowance for committing errors and mistakes. The occurrence of mistakes is generally viewed negatively and responded to punitvely. As a result, some nurses may avoid completing incident reports. Research by pharmacists Barker and McConnell (cited by Newton and Newton,1977:62) on medication errors concluded that 29 percent of all nurses can be expected not to report any type of medication error. Newton and Newton (1977) speculate that nurses fear disciplinary action or disapproval by nursing colleagues and superiors.

The focus of this research was to describe nurses' perceptions of incident reporting and to determine the effects of personal and professional variables on nurses' perceptions of incident reporting in an urban, active-treatment, general hospital. If it has been shown that some nurses do not complete incident reports for medication errors, would nurses' responses to other unusual occurrences be similar? The literature suggests several factors that are responsible for nurses' perceptions and behaviors regarding incident reporting. Leadership style, nurses' fear or ignorance of the legalities surrounding their own practice, characteristics of incident reporting policy, procedures, and guidelines or an environment which will not tolerate "trial and error" learning are factors which may encourage unethical incident reporting practices. Practical experience may also contribute to the nurse's repertoire of decision choices regarding who, what, and when to report. Consequently, some nursing practices may transcend prudent and professional nursing practice standards. Although research in other areas has delimited factors impacting on group and individual behavior, there is a paucity of empirical data that specifically relates these factors to nurses' incident reporting behaviors.

Statement of the Purpose

The purpose of this research was to describe nurses' perceptions of incident reporting and to ascertain through appropriate statistical analysis personal and professional variables influencing their perceptions of incident reporting.

Statement of the Research Problem

The problem this research addressed was what are nurses' perceptions of incident reporting on adult medical, surgical, and intensive care areas in an active treatment, urban general hospital; and what personal and professional variables influence their perceptions of incident reporting. The sub-problems were:

1. What is the organization and nature of incident reporting in the hospital?

2. What are nurses' perceptions regarding the actual and ideal purposes of incident reporting?

3. What are nurses' perceptions regarding situations requiring completion of an incident report?

4. What are nurses' perceptions of the frequency with which guidelines for incident reporting are practised?

5. What are nurses' perceptions regarding actual and ideal incident report processing?

6. What are nurses' perceptions of factors influencing incident reporting?

7. What are nurses' overall perceptions of incident reporting?

8. What are the personal and professional variables that significantly influence nurses' perceptions of the actual and ideal purposes of incident reporting?

9. What are the personal and professional variables that significantly influence nurses' perceptions regarding situations requiring completion of an incident report?

10. What are the personal and professional variables that significantly influence nurses' perceptions of the frequency with which guidelines for incident reporting are practised?

11. What are the personal and professional variables that significantly influence nurses' perceptions regarding the actual and ideal incident report processing?

12. What are the personal and professional variables that significantly influence nurses' perceptions of factors influencing incident reporting?

13. What are the personal and professional variables that significantly influence nurses' overall perceptions of incident reporting?

Definitions

Staff Nurse (RN)	A full time, registered nurse who directly interacts with the patient to meet identified patient care needs according to established nursing care standards and hospital policy.
Unit Supervisor (US)	A full time, registered nurse who supervises and administers nursing services in a patient area in accordance with established nursing care standards and hospital policy.
Assistant Director Nursing (ADN)	A full time, registered nurse who supervises and administers nursing services of designated patient care areas in accordance with established nursing care standards and hospital policy.
Registered Nurse	A nurse registered pursuant to the Nursing Profession Act and a registered member of the Alberta Association of Registered Nurses(A.A.R.N.).
Active Treatment Hospital	A facility for the diagnosis and treatment of patients with acute disease signs and symptoms.
Medical Area	Area where adult patients are admitted for diagnosis and treatment of acute illnesses which do not require surgical intervention.
Surgical Area	Areas where adult patients are admitted for diagnosis and treatment of acute illnesses which frequently require surgical intervention.
Intensive Care Area (ICU)	Area where adult patients are admitted for diagnosis and treatment of acute medical-surgical illnesses causing multi-system failures.
Incident Report	An incident report is the accounting and analysis of an event which is inconsistent with: 1. the standard operation of the hospital, 2. hospital policy and procedures, 3. routine of patient care; and/or the safety of patient, staff, and visitor on hospital property.

Personal Variable	Inherent and acquired characteristics which differentiate one nurse from another. Age was examined in this study.
Professional Variable	Factors related to an advanced education, highly developed skills and moral ethical standards which differentiate one nurse from another. Education and continuing education, area of nursing practice, nursing experience and position, affiliation with interest and professional groups, and participation in nursing research were examined in this study.

Significance of the Study

This study should have value in that it will add to the lack of empirical data available on nurses' perceptions of incident reporting and the factors influencing nurses' perceptions of incident reporting in a hospital setting. It is hoped the findings will:

1. Assist nurse-administrators to identify aspects of the incident reporting process with which nurse-supervisors and staff nurses have experienced difficulty implementing in the practice setting.

2. Encourage nurse-administrators to review, re-evaluate, and, if appropriate, revise policies, procedures, and processing related to incident reporting.

3. Promote collaboration among nurse-administrators, nurse-supervisors, and staff nurses in formulating incident reporting policies that would improve consistency in implementation of incident reporting.

4. Prompt nurse-administrators to assist nurse-supervisors to develop strategies which will support staff nurses in implementing the incident reporting process.

5. Develop an awareness at all levels of the nursing department of the significance of effective incident reporting in meeting quality assurance and accreditation standards.

6. Encourage nurse-administrators to review the adequacy of current orientation programs and continuing education programs regarding incident reporting.

7. Create an interest in risk management programs and their contribution to quality assurance and cost effective hospital management.

8. Stimulate further investigation of the perceptions of incident reporting held by other hospital personnel.

9. Stimulate further research on the impact incident reporting has on improving the safety and overall quality of patient care.

Delimitations

1. The study was restricted to a large urban, active treatment hospital in Alberta. This eliminated a large population of nurses working in a variety of institutions in numerous capacities.

2. Information was sought from one adult intensive care, seven adult medical, and twelve adult surgical areas in the hospital. Pediatrics, emergency, operating room, outpatient, and psychiatric patient care areas were not included in the study. Obstetrics was located in another hospital, while a Gynecology area was used for the pilot study.

3. The nurses studied were full time, registered nurses in staff, unit supervisor, and assistant director of nursing positions. Student nurses, graduate nurses, assistant unit supervisors, clinical development nurses, and other auxillary personnel who may have been posted or employed in the areas studied were not included in the study.

4. The study was concerned with nurses' perceptions of the current policy, processes, and processing surrounding incident reporting.

Limitations

1. The study was limited by the lack of empirical research on the stated problem.

2. Recall and honesty of the respondent may have limited the validity and reliability of the responses.

3. Not all respondents would have completed an incident report.

4. The validity of the questionnaire was limited to face and content validity. Construct, concurrent, and predictive validity were not addressed.

5. No formal procedures were used to establish the reliability of the instrument. Review procedures and a pilot study assisted in refining the questionnaire. A degree of reliability was assumed when different persons interpreted questions in the same way.

6. The findings were limited to the population and situation studied. Generalizations to other staff nurses and nurse-supervisors or to other institutions should be made with caution.

Assumptions

1. It was assumed that all nurses had perceptions regarding the use of incident reports and the process of incident reporting regardless of actual experience with incident reporting.

2. It was assumed respondents interpreted the questionnaire in the manner intended.

3. It was assumed that all participants were prepared to respond to the items in the questionnaire honestly and accurately.

Organization of Thesis

The following chapter provides an overview of the literature and research related to the problem which has been delineated. Chapter 3 discusses the research design and methodology, and the demographic profile of the respondents. A description of the mission, goals, and objectives for quality assurance, particularly regarding safety, and incident reporting in the hospital studied are summarized. Chapter 4 contains a discussion of the findings related to interviews with the director of nursing and the quality assurance coordinator regarding the organization and nature of incident reporting in the hospital studied. The findings related to the overall samples' perceptions of incident reporting are analyzed and discussed. Significant differences between the actual and ideal purposes and processes are presented. Chapter 5 presents the significant personal and professional variables influencing nurses' perceptions of incident reporting. The procedures for analyzing the data are also presented and discussed. Chapter 6 provides a summary, conclusions, implications, and recommendations for nursing administration, practice, and research related to incident reporting.

Summary

This chapter contained an introductory section describing the research area and justification for the study. The statement of the purpose and research problem and sub-problems was also presented. The definitions for the terms used in the research design were listed. The chapter concluded with the significance, limitations, delimitations, and assumptions surrounding the problem, research design, and methodology.

CHAPTER 2

Related Literature and Research

This chapter presents a review of the nursing and health sciences literature and research related to incident reporting. Research describing the rationale for the dependent variables and research design is presented. Administration literature related to policy development and implementation in nursing and education is also briefly presented. Finally, the conceptual framework within which the study is developed is provided.

Terminology

The literature relevant to incident reporting uses the terms "incident," "unusual occurrence," "accident," and "risk" in association with the requirement to complete an incident report. "Incident" and "unusual occurrence" are used synonymously often to define each other. Among the experts on incident reporting there is general agreement with Cournoyer (1985) and Duran (1980) that an incident encompasses those events resulting in injury or threat of injury to a patient during his/her course of medical treatment. Poteet (1983:460) broadly views incidents as "any happening, with or without injury involving patient mishap or serious expression of dissatisfaction." This definition concurs with that ~~of Fiesta~~ (1983), and of Grose (cited by

Barker,1983) who describe incidents as having both a physical and psychological component. Grose is supported by Duran (1980) and Blake (1984). Blake's (1984) definition creates ambiguity by adding that an incident is any event inconsistent with routine hospital operations and patient care. Sklar (1981b) supports Blake's definition, that an incident is any occurrence which is not implied or defined by existing hospital policy or procedure. Wasuita (1982), on the other hand, rejects any efforts to define an incident, arguing that what constitutes an incident varies according to individual perceptions of an event.

In legal terms, an incident may be an event arising from the negligence or malpractice of doctors and nurses while fulfilling their professional obligations to the patient (Creighton,1981; Picard,1978; and Rozovsky,1979). Legally, an incident need not be confined to an institutional setting, but may occur in a doctor's office, a patient's home, a clinic, or at the scene of an accident where a doctor or a nurse may be initiating emergency medical or nursing care. Incidents are often described as accidents: events that could have been averted with better environmental safety precautions, or medical and nursing practice and accountability (Wasuita,1982). An accident, according to Webster's College Dictionary, is a circumstance or unusual occurrence which causes bodily injury or property damage. Further to this is the additional implication of negligence or malpractice.

"A risk is an exposure to a chance occurrence that may result in loss of possession, damage, or destruction of property or injury to oneself or others" (Rosenthal and Rosenthal,1983:38). According to these authors, a risk has the potential to become an incident, although Kinloch (1982) emphasizes that an incident is a risk situation. A risk situation may involve staff, patients, or visitors on hospital property, and presents the possibility of injury to those individuals or a deterioration of care necessary to protect the safety of those individuals. Jackson and Lynch (1985) use the term "risk" to describe the probability of the occurrence of an untoward event. Factors that are associated with increased risk of developing an untoward event are called risk factors. Risk factors are inherent in social and physical environments, and in individual behavior. Some risk factors such as predisposition to certain diseases are hereditary.

The key to the definition of an incident, accident, or risk is that it must be perceived as such by an observer along with its legal, financial, and qualitative implications. In the United States the need to identify risks in health care institutions has emerged out of a practical need to protect the assets of the institution, particularly in terms of insurance costs and litigation. Presently, Canadian society is not as litigious orientated, but in the face of rising health care costs and consumerism the public is demanding greater accountability for quality and cost-effectiveness from the health care system. Thus, the need to define and anticipate "incidents" is of concern to health care administrators.

Purposes of Incident Reporting Policy

Policy is developed and endorsed by top level administrators as guides to decision-making and behavior throughout the organization. Such decisions affect the way in which overall services are delivered in order to achieve the hospital's mission, goals, and objectives. Policy in the form of rules, regulations, and procedures provide for continuity, stability, and uniformity by explaining in concise and explicit terms the specific obligations of employees. As such, policy sets limits on what personnel can and cannot do (Hoy and Miskel,1978).

In order that any policy be implemented effectively and efficiently, the first priority to be considered is that the purpose statement be clearly understood by those responsible for the implementation of the policy (Moore,1971). Driscoll (1975) also emphasizes that practicality and specificity are important in any policy if its purpose is to be accomplished. Bryant and Korsak (1978) and Goodman (1984) note that among the problems with implementation of incident reporting is a lack of understanding of the purpose of the system. Curtin (1981) feels that the negative image and impact of incident reports is due to lack of clear purpose. Although the stated purpose of incident reports is to assess the quality of nursing practice and safety of the practice environment, according to Curtin, often the actual underlying purpose is to punish the employee.

Rozovsky (1984) cites the purposes for maintaining records such as incident reports:

1. Ensuring patients receive average, reasonable, and prudent care.
2. Teaching staff as part of a continuing education program or training students as an accredited training facility.
3. Auditing medical and nursing care in order to review the pattern and quality of care.
4. Abiding by C.C.H.A. standards as they relate to review and coordination with other hospital records.
5. Abiding by statutes and legislation, insurance, tax, funding, and medicare directives.
6. Providing legal defence for the institution, employee, medical or nursing staff in the event of a law suit.
7. Maintaining statistical records.
8. Contributing to research projects.

Joseph and Jones (1984) and Poteet (1983) suggest that objectives of incident reporting should include:

1. Defining those instances that place management at some financial risk.
2. Determining the frequency of incidents.
3. Identifying appropriate remedial or preventative measures.
4. Balancing the cost of prevention against permitting the risk to remain at possible financial loss.

Blake (1984) emphasizes that the purpose of incident reporting is not to place blame, find fault, discipline, or satisfy a supervisor. Poteet (1983) suggests that incident reports can be used as motivators. The belief is that no one wants to be associated with the hospital area found to have the most incidents reported. Duran (1979) discourages the use of incident reports to criticize or punish. Instead, staff should be encouraged to analyze their written account of the incident and take indepth measures to prevent further occurrences.

Kinloch (1982:16) suggests that the inherent purpose of incident reports should be to advise management of any occurrence that has the potential of causing injury or deterioration in patient care. For the most part, incident reports "retrospectively identify risk situations that have occurred."

Philpott (1985:130) emphasizes that the purposes of incident reporting must be aligned with organizational goals so that the latter may be advanced effectively. She states that incident reports are mechanisms used to:

1. Monitor the type and frequency of risks associated with certain approved programs and hospital activities.
2. Provide data prior to taking remedial action to reduce or eliminate the causes of incidents. Incidents occur as a result of a variety of deficits in a system and hence a variety of remedial approaches may be required.
3. Demonstrate steps undertaken by management in the prevention or reduction of forseeable risks.

Whatever the purpose of a particular policy, including incident reporting, it tends to become ineffective if the purpose is lost, no longer relevant, or inappropriate (Stevens,1980).

Along with purpose, a number of authors advocate the inclusion of the organization's mission statement or philosophy in the policy statement. This should convey to subordinates the commitment of higher levels of administration to the implementation of the policy as well as the policy's relationship to organizational goals (Duran,1981; Barker,1983; Stevens,1980; Simms, Price, and Ervine,1985; Gryzbek,1979; and Salman,1979).

According to Creighton (1981) and Duran (1980) the purposes of incident reporting may be summarized as:

1. Improving the management and treatment of patient care.
2. Documenting the occurrence of an incident or deterioration in services or environment.
3. Communicating the status of hospital operations to administration.
4. Reporting potential medical-legal claims to insurance companies and hospital solicitor.
5. Developing continuing education programs which include teaching legal responsibilities for safe patient care.

Situations Requiring Incident Reporting

The complexity of the hospital environment, its programs and equipment, together with the large varieties and numbers of health care workers, patients, and visitors circulating within the environment create potential and actual hazards (Philpott,1985). Earlier, definitions for "incidents," "accidents," and "risks" were listed. In order that incidents be identified as such, the nurse's subjective decision as to what constitutes an incident and the institution's conception of an incident need to be aligned.

It is an impossible expectation that a unanimous agreement as to what comprises an incident will always prevail. However, without a standardized and widely accepted definition of an unusual incident within the hospital, reporting will probably not be as accurate, timely, or appropriate (Barker,1983). "Generalities in policies can lead to confusion and, if not strongly stated, make them vulnerable to those individuals who make rules to suit their own needs" (Driscoll,1975:1036).

Barker (1983:33) outlines a comprehensive list of incidents that require the initiation of an incident report:

1. Medication errors, reaction, or injury.
2. Injury resulting from diagnostic or therapeutic procedures.
3. Patient falls for any reason.
4. Mishaps due to faulty patient care equipment.
5. Accident or injury to staff arising from or involving the action of patients.
6. Loss of narcotics or other controlled drugs.
7. Fire.
8. Any event with or without patient mishap resulting in serious expression of dissatisfaction/complaint or threatened litigation.

Incompetent professional practices and employee injuries are also considered incidents (Cournoyer,1985).

Kelly (cited by Penbirth,1979) lists additional sources of nursing negligence:

1. Loss of personal valuables.
2. Failure to complete physicians' orders.
3. Failure to recognize dangers inherent in physicians'

orders.

4. Failure to heed to safety precautions.

Creighton (1981), Duran (1980), Picard (1984), and Poteet (1983) cite the most common suits involving nurses as resulting from the following incidents:

1. Administration of medication.
2. Assisting in the surgical suite.
3. Falls.
4. Burns.
5. Electric shock.
6. Injury due to faulty equipment.
7. Nosocomial infection.
8. Mistaken identity.
9. Misinterpretation of signs and symptoms.

Canadian hosptials are insured through private companies so that no national statistics on claims are available. Picard (1984) has summarized lawsuits that have been brought against health care professionals and hospitals in Canada since the beginning of this century. Commonly brought lawsuits against nurses have been initiated under burns, injection errors, hospital acquired infections, care of patients with fractures, failure to diagnose, and unnecessary pain and suffering. Many lawsuits involved injuries to patients that occurred during anesthesia as a result of negligent medical and nursing management. Nurses were not found liable in all suits, whereas hospitals were found vicariously liable. According to Picard (1984), over the past ten years there has been no dramatic increase in the number of lawsuits brought against the medical or nursing professions. However, Canadians are suing more frequently. Between 1960 and 1984 the number of writs served to the medical profession has increased from 16 to 516 per year (Picard,1984). According to Picard unionism and professionalism will bring nurses under increased legal scrutiny in the future.

Duran (1980) notes that medication errors often result from a nurse failing to follow the five R's of medication administration, that is, right patient, right drug, right route, right dose, and right time. Nurses have also failed to follow the hospital medication procedure. An abundance of nursing studies on patient falls and medication errors prevails in the nursing research literature reflecting frequency and concern for the occurrence of such incidents.

The high rate of medication errors, patient falls, and intra-operative incidents is substantiated by current trends in health care. Pharmaceutical research has introduced an overwhelming number of medications for the treatment of the disease. Nurses spend a great deal of time preparing, administering, and documenting medicinal treatments (Duran,1980). With the average life span of Canadians increasing by 25 years, fall-related incidents common to the geriatric patient in hospital will also increase. Alberta leads the country in the number of institutions for the aged (Statistics Canada,1984a). Despite a variety of community and governmental programs geared to care of the elderly at home, the number of patients remaining in active treatment facilities because of auxillary bed shortages continues to increase. According to Statistics Canada (1984b), Alberta holds the highest rate for surgery performed in Canada at 75 per 1000 inhabitants. At the hospital studied, the number of surgical procedures between 1984 and 1985 increased by 1400, despite the fact there have been no staff increases, additional hospital beds, or operating rooms allotted (Annual Report,1985). The incidents surrounding intraoperative care may be affected by the per capita increase.

Sources of Liability

Personal liability. "The rule of personal liability states that every person is liable for his own tortious conduct. A tort is a private or personal legal wrong" (Bille,1980:75). Personal liability exists in one's personal life as well as in the employment setting. Once the nurse has acted in a situation, the consequences of that act are solely the nurse's responsibility and cannot be assumed by another.

Negligence. Negligence may be broadly equated with carelessness and defined as "conduct falling below the legal standard for the protection of others from an unreasonably great risk of harm" (Viles,1980:84). Rozovsky (1979:59) refers to negligence "as the act which a reasonable man would not have done, or the failure to do something which a reasonable man would have done, thereby causing harm to another." Nursing is subject to the duty to exercise reasonable care to avoid acts and omissions which might reasonably be forseen to likely injure others (Evans,1984). Since the nurse sees herself as having special skills and training she will be judged in accordance with acceptable standards set by her profession, the accrediting, federal or provincial agencies, and quality care standards and/or the policies and procedures of the institution. The legal standard is not necessarily that of the best, but of the average, reasonable and prudent nurse in that particular set of circumstances (Rozovsky,1979).

Incompetence. Negligence differs from professional incompetence in that the latter refers to unfitness to practice. Findings of professional incompetence frequently result from errors in the preparation and administration of medications, lack of judgment in carrying out aspects of the nursing process, or poor interpersonal skills (Sklar,1981a).

Vicarious liability. Under the rule of vicarious liabilty, the institution is liable for the negligent acts of its employees when the acts occur within the scope of the empolyee's position description and work activities (Rozovsky,1979; and Picard,1984). This results from the assumptions that the employee acts at the employer's institution for his benefit. Therefore, the hospital is found liable because it is seen as having the responsibility for selecting competent nurses (Picard, 1978). Respondeat superior, a legal concept encompassed by vicarious liability, is the term applied to a situation where an employer is held liable for the wrongful acts of the employee even though the conduct or actions of the employer are not at fault. Trandel-Korenchuks' (1983:76-77) two conditions of the employer-employee relationship before respondeat superior is legally acceptable are that the:

1. Employer has the right to control and supervise the performance of the employees' duties.
2. Wrongful act must occur within the job discription for that employee.

Many nurses assume that the physician or the hospital will assume legal responsibility for their actions (Walker,1983). The "Captain of the Ship" and "Borrowed Servant Doctrines" are legal concepts that hold the physician responsible for the acts performed by hospital employees under his directive. These concepts are no longer valid since the evolution of the nursing profession has led to the creation of independent and interdependent nursing functions. Consequently, nurses can be personally liable for acts of negligence (Bille,1980; and Goodman,1984).

Common Acts of Negligence

Burns. The hospital may be held liable if equipment burns a patient because the equipment and personnel to operate it are supplied by the hospital. Personnel, as well, would be assessed for the degree of care used in applying the equipment (Creighton,1981; Picard,1984; and Rozovsky, 1979).

Falls. Side rails and other restraints can prevent or reduce the hazards of falls. Such precautionary measures are often absent, leading to falls and injuries resulting in damages. Confused or senile patients require such intervention from nursing staff. If a patient fell under any circumstance and was injured, the law would examine whether reasonable and appropriate precautions were taken considering a nurse with similar training and in such circumstances. If the patient were unmanageable, this would also be considered (Creighton,1981).

It is also the hospital's duty to prevent injury to visitors due to unusual dangers in the environment. An unusual danger is legally defined as circumstances not usually encountered by the class of individuals involved. Icy steps, uneven sidewalks, water on the floor, or a hospital-acquired infection may be unusual dangers for visitors. Rozovsky (1979) cautions that what may be usual for hospital personnel may be unusual for visitors.

Failure to observe/take appropriate action. Numerous incidents occur where nurses have been negligent in failing to adhere to standards in assessing the patient, or the nurse has reported patient distress and the physician has failed to investigate the report. Other instances occur when a nurse fails to report the negligence or malpractice of another nurse or a doctor. In all instances, the observor nurse may be negligent in failing to exercise reasonable judgment (Creighton,1981; Duran,1980; and Picard,1984).

Medication errors. Nerve damage as a result of improper injection techniques, route, and site selection are sources of liability. Improper medication administration can prolong a patient's hospital stay as a result of adverse side effects and drug reactions, absess formations, and death from overdosage. The number and variety of medications used in medical management and their potency makes room for inevitable error (Creighton,1981).

Nurses (and physicians) must be knowledgeable and skilled in the administration of intravenous medications. Wrongful administration can cause tissue damage, possibly leading to infection and extravasation (Creighton,1981; and Rozovsky,1979).

Mistaken identity. Failure to adhere to proper patient identification procedures have resulted in patients receiving the wrong medication or treatment. Recording on the wrong chart, misfiling chart pages, or identifying chart pages incorrectly is legally unsafe and can lead to other serious errors (Creighton,1981).

Defects in apparatus. If defects in equipment are obvious, and the nurse uses that apparatus, she is held liable for any injury arisíng from its application. The nurse is responsible for notifying the appropriate persons of the malfunction. However, the nurse cannot be held responsible for hidden defects in equipment. The hospital is liable in this instance. The nurse has a responsibility for knowing how to use the equipment properly (Creighton,1981; Bille,1980; and Rozovsky,1979).

Loss or damage to patients' property. The item most frequently involved in insurance claims is dentures. When a patient carries personal property to the hospital, the institution is responsible for exercising reasonable care in protecting the patient's money and valuables. When the nurse takes responsibility for storage of a patient's property, a list should be made of the items, cosigned by another staff member or the patient, and the items stored in a safe place (Creighton,1981; Bille,1980; and Rozovsky,1979).

Infections. Through their adherence or lack of adherence to aseptic technique, nurses may be a factor in infection control in the hospital. To prevent infection nurses are bound to use care, and if they fail to do so they may be held liable for damages. Post-operative wound infections may be due to improper care of the environment, both in the surgical suite or in the nursing area (Creighton,1981; Picard,1984; and Rozovsky,1979).

Assault and battery. Battery is the application of force to the person of another without lawful justification. No physical harm needs to occur. If a patient feels his/her personal dignity or reputation is damaged, he/she may sue. If a patient is subjected to treatment he/she may not want, he/she may claim battery.

Assault is placing another person in reasonable fear of battery. If a patient or his family feels they have suffered injury from any aspect of physical and verbal abuse or have been neglected or mistreated in any way, they may seek compensation through the courts (Creighton,1981; and LaRocco,1985).

Freedom from unlawful restraint is an individual right (Rozovsky1979). Unless authorized by law or consented to, involuntary restraint of any degree may constitute assault or false imprisonment. If a nurse fails to protect the patient by using restraints she may be negligent but may also be liable if proper procedure for applying restraints is not followed.

Narcotic control. The Opium and Narcotic Drug Act contains the entire code for legal as well as the illegal use of narcotic drugs. The Department of National Health and Welfare aided by the Bureau of Dangerous Drugs conduct periodic audits of hospital pharmacy records as to their supply and use of narcotic drugs. For this reason, nurses are responsible for ensuring that narcotic counts at the end and/or beginning of each shift are correct and completing an incident report if they are not correct.

Charge responsibility. One of the critical situations that contribute to hospital liability is a nurse who is placed in charge of an area without ever having been given the management tools to perform this responsibility (Rozovsky,1979). Staffing shortages are often the reason such circumstances come to play. "Float nurses" are often placed in charge of areas with which they are unfamiliar. The law expects that nurses will exert independent judgment in assessing the safety and competence with which care is given to the patient. By assuming a "charge nurse" position the nurse embraces the expectation she will not only be responsible and accountable for her own decisions in that role, but also for the acts of others under her supervision (Creighton,1981:146; and Bille,1986).

Philpott (1985) states that the law delegates to the nurse in charge the responsibility for knowing the nursing needs of the various patients on the unit, and that she organizes for their care based on some reasonable rationale. Cushing(1986) cites several lawsuits in the United States in which nurses have been held accountable for inadequate nursing care related to staffing problems even though staffing was beyond their control. The hospital may be held liable for careless staff scheduling if it results in injury to patients or staff (Rozovsky,1979).

Intensive care unit. The legal responsibility of the critical care nurse is the same as that of a nurse in any area of nursing in that she is responsible for her own conduct. In addition, nurses in a critical care area must have sufficient knowledge to assume correct judgment in decision-making. The critical care nurse must also understand complicated electronic devices used to determine various physiological parameters. She must also be able to institute emergency measures without the supervision of a physician. This may involve treatment using machines as well as using equipment properly to manage life threatening situations. Such sophisticated equipment also malfunctions, and the nurse must be able to assess the patient without the aid of equipment.

Causation Theory

Blake (1984) emphasizes that incidents in hospitals do not always have a cause-effect relationship. Incidents do not always occur in the presence of unsafe acts and unsafe conditions. In the absence of such circumstances, incidents can still occur. She advances a theory of multiple causation which states that many concomitant circumstances cause accidents. Incidents comprise a proximate and a primary cause. Proximate causes are unsafe acts and unsafe conditions some of which have been referred to in the previous section. Primary causes relate to deficiencies in managerial policies and procedures, supervisory effectiveness, educational systems, recruitment and hiring practices, and types of equipment. Incidents are a result of people, objects, and the physical environment interacting in some critical succession. The key is timing because often known causes of incidents can exist for long periods of time with no damaging consequence. However, at some point in time a particular sequence occurs that results in injury to a patient, staff, or visitor.

Jackson and Lynch (1985) also propose a causal association between the occurrence of an event and an outcome. They outline five criteria that can be used to determine if a particular risk factor is conclusively related to an outcome. Both approaches are important to the principles surrounding investigation and analysis of incidents.

Guidelines to Incident Reporting

Frey (1976:37) observes that "inherent in policy are values, recognition of facts, regard for law, and democratic consideration of the ideas and opinions of others." Stevens (1983) emphasizes the importance of policy and actual practice not conflicting in the event of litigation. "In court cases employees are likely to be held to common practice, not to the published policy when the two differ" (Stevens,1983:134). Practices may or may not implement policy. Some practices are a result of inadequate operation of systems which deter the desired implementation of the policy.

Policies are important to bureaucratic institutions like hospitals because they relieve nurses of the pressure from making decisions in routine situations. Seward (1969) and Moore (1972) concur that the authority to make decisions cannot be delegated equally to all nurses because of the differences in their competencies and technologies. High uniformity of personnel allows for less precision in policy, but because of the diversity of nursing expertise among members of nursing service policy must be detailed (Stevens,1983).

Nardechia and Meyers (1980) observe that in order to enable staff to make responsible and accountable decisions about when and when not to report, as well as what to report to their supervisors, explicit reporting guidelines must be presented. Duran (1980) also emphasizes that guidelines surrounding incident reporting must be such that nurses can initiate inquiries into deviant medical and nursing care without fear of jeopardizing their position in the hospital. Philpott (1985), Rozovsky (1979), Sklar (1981b), and Wasuita(1982) suggest that incident reporting policies must include strict guidelines as to the information desired on the incident report. The policy should indicate the circumstances requiring the preparation of the report, who should prepare it, the information to be included, and to whom the report should be forwarded. The primary objective of explicit and detailed guidelines is to ensure that a form is complete and accurate in its content. If a form is incomplete, the information cannot be properly analyzed, nor can the circumstances surrounding the situation be understood (Jones and Dodge,1980; and Gryzbek,1979). A written record is regarded as communication between the reporter and numerous others who may be implicated in the incident. Failure to maintain established standards may be regarded as negligence and result in loss of funds, accreditation, or weakened legal defence. When an unusual event occurs within the hospital, employees are required to properly complete an incident report for the hospital records (Picard,1978; and Rozovsky,1979). Rozovsky (1983:6) explains that "failure to record information or to record it correctly can result in someone taking incorrect action or failing to take action eventually contributing to patient injury."

The protocols for recording the incident are clearly outlined by legal statutes. Accuracy is important. Documentation of the incident must convey the information it was intended to convey. Merryman (1984), Cournoyer (1985), Poteet (1983), Sklar (1981b), and others emphasize the importance or recording the facts as they occurred and not opinions or conclusions. Judgmental or defensive remarks or accusations should be avoided. Such actions are legally inadvisable and hamper patient care and effective remedial action (Sklar,1981b). To ensure accuracy, the individual who is most familiar with the incident should complete the report (Rozovsky,1979). That individual could be the perpetrator of the incident, a witness to the incident, or the discoverer of the incident. If the written version of what the reporter saw conflicts with that of another, then each staff member should complete separate incident forms (Philpott,1985; and Joseph and Jones,1984). Sklar (1981b) suggests including the patient's relevant comments in the report if the incident involves a patient. Recording done by any other may result in entries being ignored by the courts or it may give rise to inferences that errors exist (Rozovsky,1979).

Rozovsky (1979) and Philpott (1985) cite other requirements that are dictated by the legal standards for record keeping. Clearly distinguishable signatures, legible writing in the same color of ink, appropriate use of abbreviations and terminology, and clearly indicated errors are additional guidelines that must be adhered to in order that the document remain viable if needed in an actual lawsuit.

Rozovsky (1979) advocates the inclusion of opinions and speculations of the writer in the report as long as they are identified as such. He adds that additional information that is not readily apparent from the patients records may also be included. Omitting opinions, according to Rozovsky, would in certain circumstances be considered negligence if such omission resulted in patient injury. Picard (1978) agrees that, from the point of improving the level of care in hospitals, Rozovsky's viewpoint is "sound advice." However, until the status of incident reports as evidence in courts of law is established, a more cautious course of action is a factual, non-judgmental approach to completing incident reports. In cases of certain litigation, administration would most likely ask the employee for a more complete report, including opinions and speculation to be sent directly to the hospital's solicitor as privileged information.

Barker (1983) notes that as a legal document the incident report narrative should be factual and objective, therefore a checklist is more in keeping with this objective. However, as a quality assurance tool the incident report should allow as much narrative as possible since the information may be used by many departments, each requiring insight into a different aspect of the circumstance.

Barker (1961) developed the "OOPS Report," an acronym for One Object-Patient Safety, for his study on medication errors in hospitals (Appendix A). After completing an incident report, nurses could use the form to offer a personal opinion and recommendation regarding the unusual occurrence, and submit it to him anonymously. He discovered that many "incidents" that were reported on the "OOPS" form (67%) were not reported on an incident form. Barker also discovered that 40 percent of the nurses in the sample objected to anonymous reports. Barker's subjective conclusion was that for a nurse to admit to favoring an anonymous report implied a transgression against professional goals of responsibility and accountability. A strong subjective impression that Barker received from data on the "OOPS" form was that in most cases more information was included which would be potentially useful in investigation of the error than was included on the incident form. He noted, however, that questionnaire report forms collected more information in total than did the "OOPS" form.

Carroll (1967) emphasizes detail and accuracy in reporting. Litigation may occur a while after the incident when exact details are forgotten. Rabinow (1982) agrees that only the significant data about the event, nursing and medical action taken should be documented. But from a lawyer's point of view, most incident forms tell little other than whom to interview regarding the incident. Experience has shown that witnesses appearing before the court also have little to refresh their memory and, consequently, they are not convincing witnesses on the stand.

A standard form should have the name, address, age, prior condition of the patient, exact location, time, date, and description of the occurrence. The identification of other staff, patients, and visitors who witnessed the incident should be documented on the report including their addresses and telephone numbers (Merryman,1984; and Sklar,1981b). The physician's examination data, if applicable, and the head nurse's and supervisor's immediate and follow-up remedial action should be documented in comprehensive, concise narratives. Checklists, completion of blanks, or question formats can also remind the reporter of other details relevant to the incident. Richards and Rathborn (1983) advocate a form design that requires minimum decision-making on the part of the reporter. "Yes" or "No" answers are most desirable while open-ended responses should be limited. Unstructured comments complicate data analysis and create legal problems if discovered during litigation (Swartszbeck and Milligan,1982). Pierce (1984) suggests a checklist be added to the incident form regarding errors made in medication administration. The form allows the nurse to respond to all prescribed steps of medication administration as well as to express opinions and discuss factors related to the cause of the error.

Philpott (1985:132) outlines additional facts that should be included in an incident report:

1. Ambulatory status of the patient.

2. Number of days post-operative, if applicable.
3. Notification of next of kin, if patient is disoriented.
4. Safety measures in effect prior to incident.
5. Type of incident.
6. Contributing factors.

Kinloch (1982) suggests that, where appropriate, the patient's kardex, care plan, medication and treatment cards along with copies of policies and procedures related to the particular incident, nursing rotation, bedside worksheets, and daily work assignment sheets should be sent with the incident report to administration if litigation is suspected. These data will promote better recall of the actual facts.

The format of the incident report should be such that it takes minimal time and effort to complete (Joseph and Jones,1984; Merryman,1984; and Poteet,1983). Table 2.1 shows the costs that completing an incident report incurs, assuming that ten minutes is the average time needed by each staff member to complete their section of the report.

Table 2.1

Cost Factor For Incident Report Completion

Position	Average Hourly Wage Rate	Time to Complete Report	Cost
Staff Nurse	$16.17	10 min.	$2.70
Head Nurse/US	$18.06	15 min.	$4.52
Supervisor/ADN	$22.00	10 min.	$3.67

Wasuita (1982) comments that efforts to be concise must be complimented by efforts to ensure that the information provided allows for insight into the problem. A report that requires extra time to complete can be a worthwhile endeavour.

The report should be completed at the time the incident occurs. If the court perceives that excessive time has passed the court may assume that the report was completed as a cover-up rather than a record of the event (Rozovsky,1979; Carroll,1967; Dwyer,1982; Massie,1984; and Sklar,1981b). Negligence may also be cited (Bille,1980). The form in its entirety should be completed within 24 hours and forwarded to the supervisor (Cournoyer,1985). Poteet (1983) ~~also~~ emphasizes the need for prompt reporting and processing in order to promote effective remedial response and follow-up to the incident.

The nurses' notes should contain relevant clincal information so that those responsible for the patient are aware of the incident along with the medical and nursing action taken, the patient's response to the incident, and the clincal intervention. Continuity of care is achieved and staff alerted to the possibility of futher intervention as a result of the incident (Sklar,1981b:43). The court will also be interested in noting if care was allowed to deteriorate following the incident (Rabinow,1982).

Merryman (1984), Picard (1978), and Rozovsky (1979) warn against the completion of an incident report being documented on a patient's chart. If documented on the nurses' notes the incident report is subject to discovery by the patient's legal council and can be admissible as evidence in court.

In Alberta, Ontario, Quebec, and Saskatchewan the patient has a right to inspect and duplicate his hospital record. Legislation in most provinces permits the admission of hospital records into court as evidence provided that they are made "in the usual and ordinary course of hospital business and at the time of the act or event recorded, or written within a reasonable time afterwards" (Picard,1978:291). Section IX of the Alberta Evidence Act outlines the circumstances under which hospital records can be admitted for evidence. Specific provisions have been enacted that accord privilege to any documentation being used for the purpose of education or improvement of hospital care or practice, or arising from a peer review process or committee in the hospital. In addition, no member of any such committee may be compelled to testify with regard to such matters of investigation (Batty,1985). Sklar (1981b) cautions that whether or not privilege is attached to any communication within the hospital depends on the facts and circumstances considered at the time of litigation by both parties.

For the incident report to be privileged, there must be frequent consultations between the administrator and hospital solicitor regarding reports. Confidentiality should be demonstrated in that the reporter, the administrator, and the solicitor are the only persons seeing it. Reports should not be photocopied (Merryman,1985). The report should be marked confidential to ensure its being treated and observed as privileged (Picard,1978).

At the area level neither the report nor the incident should be discussed with unauthorized individuals (Cournoyer, 1985; Rabinow,1982; Rozovsky,1979; and Creighton, 1979). Policy must also assure the employee that the report is a confidential document (Curtin,1981; Duran,1979; and Wasuita,1982). Philpott (1985), Creighton (1983), and Dwyer (1982) caution that the greater the number of individuals who deal with incident reports, the more the report appears to be related to administrative functions rather than privileged communication between attorney and client.

Ontario courts deny any protection from production of peer review documents such as incident reports. The report is considered part of the clinical record and the existence of an incident report cannot be concealed from the patient's attorney. Proponents of this decision believe that availability of the report to other health care personnel promotes a team effort in assessing the cause of the incident. The history of litigation in health care facilities across Canada does not warrant the paranoia surrounding incident report's availability to the patient (Wasuita,1982).

Rozovsky (1979:100) observes that the problem of privileged communication has not been dealt with by Canadian courts so there is no definite answer as to what course of action hospitals should take in using incident reports as a communication tool. For all reports to go to the solicitor is impractical but the administrator should confer with the solicitor on more serious incidents. In these instances the report should be marked "confidential" or "for the administrator only" so there is certainty the report is not routine business (Rozovsky,1979; and Horty,1968).

Picard (1978), Rozovsky (1979), and Philpott (1985) refer to retaining of records in the institution as long as they may be subject to a lawsuit. Every province has by statute limitation periods. These periods differ depending on the type of legal action brought forward or who is the defendant (Rozovsky,1983). Statutes of limitation periods also vary from province to province. The statutes of limitations are outlined in the Limitation of Actions legislation in the Provincial Hospitals' Act. Alberta requires that patient records be maintained ten years from date of discharge or two years after the patient reaches eighteen years. If records are microfilmed, the originals may be destroyed after expiration of one year from the date of discharge (Rozovsky,1984). General statutes of limitation could expose a nurse to liability for as much as two years. Special limitations may make this exposure one year as in the case of physicians and hospitals. From an administrative point of view limitation periods must cover all potential defendants under all possible circumstances. Medical records must know with certainty when the period is over and when retention is no longer necessary.

Reports should be filed and stored in the same geographic location as the summary preparation process (Barker,1983). This would seem to be primarily for ease of access and time saved in transcribing information. Storage of documents on tapes or computerized files does not eliminate the rules of discovery (Latissa,1979; Langhill,1977; and Creighton,1983).

The Processing of Incident Reports

The incident report is the hospital's primary mechanism for monitoring the frequency of incidents in the environment. The incident reporting process is the platform on which all other activities of the risk management program of any hospital are developed. However, if an incident report is read and filed nothing will be learned from the errors and omissions occurring in the environment. In the United States and Canada the increasing complexity of medical care delivery in the hospital setting, higher expectations of patients, changing legal standards regarding hospital liability, changing state or provincial and federal legislation, and increasing costs have popularized the development and organization of risk management programs (Barker,1983). Among some Alberta hospitals liability insurance premiums have increased over 300 percent between April 1984 and 1985 (Smishek,1986:35).

The Incident Reporting Process

Rabinow (1982) provides a schematic framework for the flow of incident report information following the occurrence of the incident (Figure 2.1). The framework shows the information flow as well as the interrelationships of incident management structures. Basically, the report is completed by the individual causing, witnessing, or discovering the incident. The head nurse would read the report and investigate the incident. She would complete her report and request a physician to enter his findings if the situation warrants his participation. The report is submitted to the supervisor who reviews the report, completes her summary and forwards it to the core administration area. The director of nursing may receive the report or it may be routed to another individual (risk manager, ombudsman, quality assurance coordinator) designated to process the forms. The report may be redirected to a number of other departments or to the solicitor and insurance carrier. Eventually the report is filed in a central location. Barker (1983) recommends five minimal requirements for an effective incident reporting process:

1. Definition and documentation of the incident.
2. Incident screening and investigation.
3. Centralized incident data consolidated.
4. Review, analysis, and follow-up procedures.
5. Risk reduction administration.

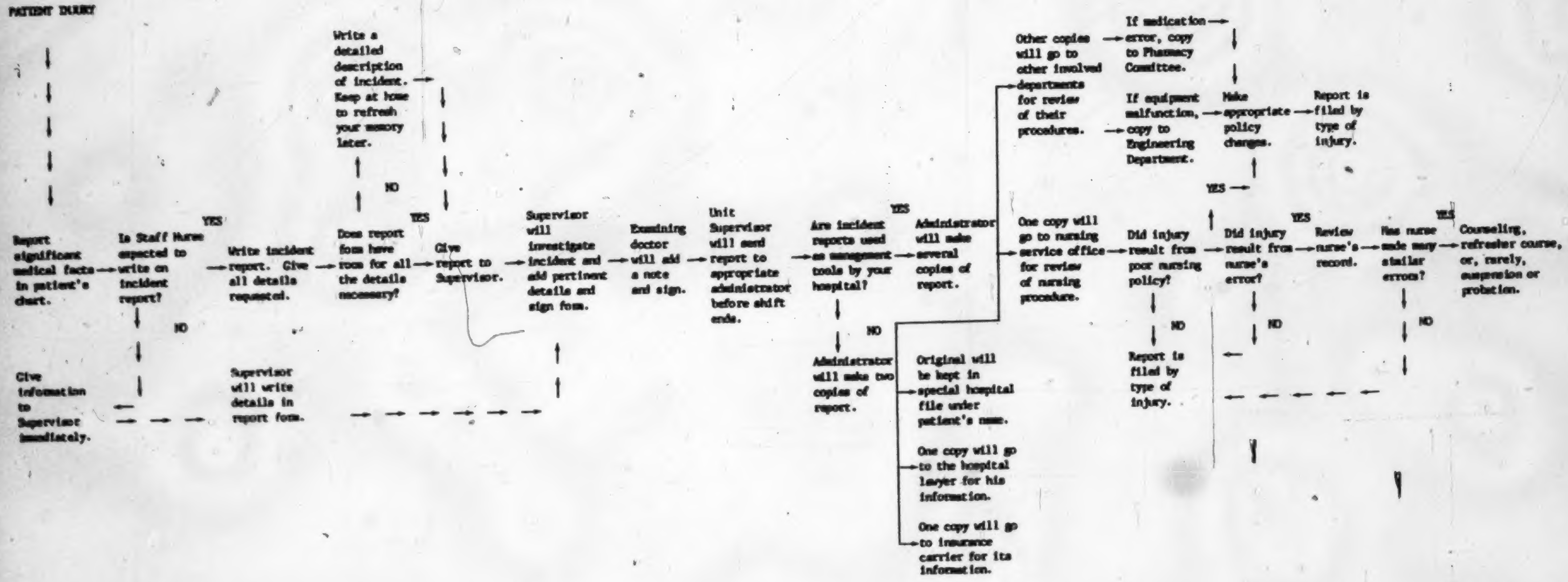

PATIENT INJURY
Report significant medical facts in patient's chart.
Is Staff Nurse expected to write an incident report?
YES
NO
Give information to Supervisor immediately.
Write incident report. Give all details requested.
Supervisor will write details in report form.
Write a detailed description of incident. Keep at home to refresh your memory later.
Does report form have room for all the details necessary?
NO
YES
Give report to Supervisor.
Supervisor will investigate incident and add pertinent details and sign form.
Examining doctor will add a note and sign.
Unit Supervisor will send report to appropriate administrator before shift ends.
Are incident reports used as management tools by your hospital?
YES
NO
Administrator will make several copies of report.
Administrator will make two copies of report.
Original will be kept in special hospital file under patient's name.
One copy will go to the hospital lawyer for his information.
One copy will go to insurance carrier for its information.
Other copies will go to other involved departments for review of their procedures.
One copy will go to nursing service office for review of nursing procedure.
If medication error, copy to Pharmacy Committee.
If equipment malfunction, copy to Engineering Department.
Make appropriate policy changes.
Report is filed by type of injury.
Did injury result from poor nursing policy?
YES
NO
Report is filed by type of injury.
Did injury result from nurse's error?
YES
NO
Review nurse's record.
Has nurse made many similar errors?
YES
NO
Counseling, refresher course, or, rarely, suspension or probation.

FIGURE 2.1 The Incident Reporting Process
(Source: J. Rabinow, 1982 : 44-45)
Reprinted with permission from the January-February issue of Nursing Life 1982: 44-45. Copyright ©. All rights reserved.

Coding, trends, statistics. Whether incident reports are received by the administrator, a committee, or a risk manager the information contained in the report must be analyzed, summarized, and action taken. Duran (1980), Latessa (1979), Langhill (1977), Philpott (1985), and many others feel that trend identification and statistical compilation of data are important aspects of the processing. Trends assist in identifying risk areas or factors.

Elnicki and Schmidt (1980) caution that each unusual incident may have a unique set of contributing factors so that summarizing may lead to false generalization. Inconsistency in reporting may lead to a misinterpretation of trends (Barker,1983; and Lambertson,1965). The number of incidents reported is not always a true indication of the safety of patients. Safety features may be in place but the staff, patient, or visitors at fault. They believe incident investigation must be more descriminating than perusing trends and patterns.

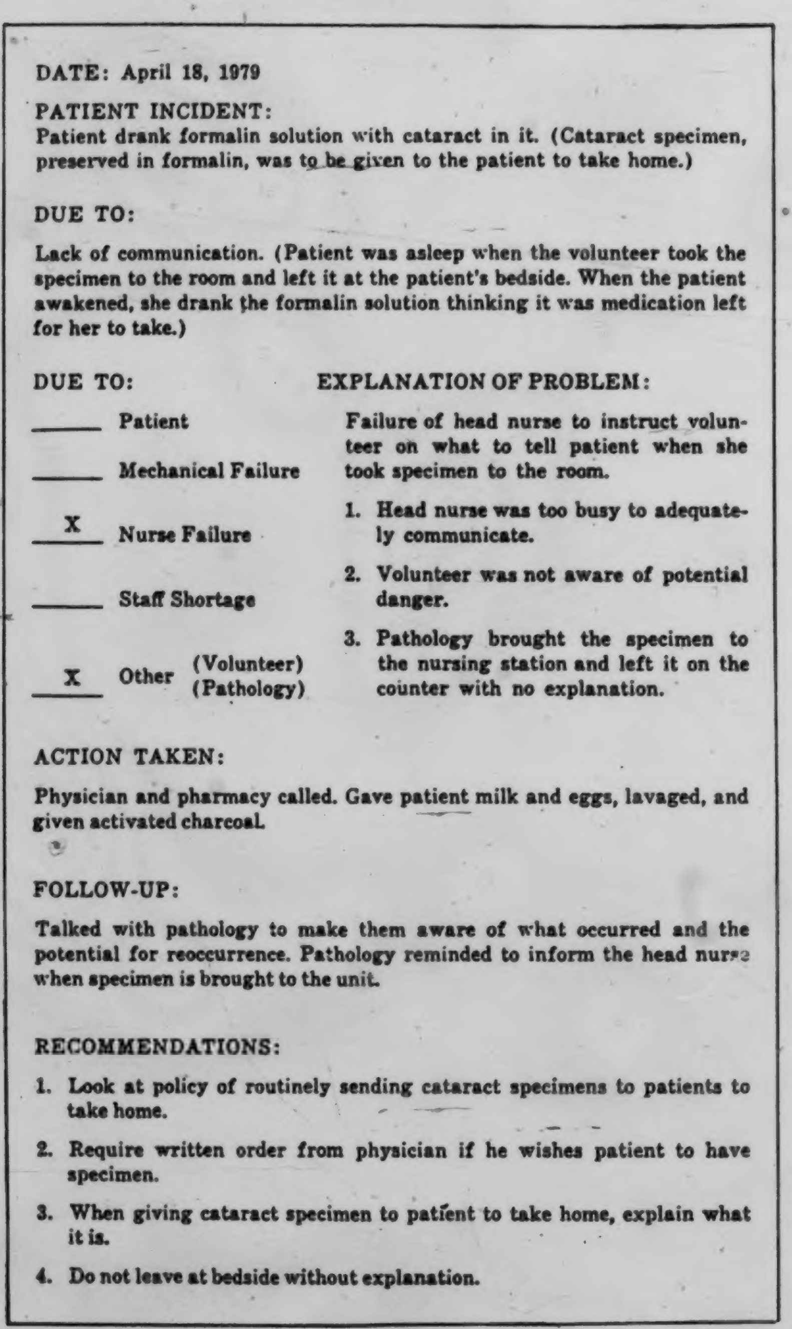
Cook and Massie (1984) and Joseph and Jones (1980) advocate classification and coding of incidents in order to overcome the hazards of summaries. Salman (1980) suggests a coding system identifying patient incidents and non-patient incidents each being dealt with by different committees. Kinloch (1982) and Wasuita (1982) suggest frequency, time, and location of incidents be used to categorize incidents.

Langway (1977) suggests that incident report data be incorporated into a computerized data processing program. Data collected in this way facilitates interdepartmental comparisons as well as enable the information to be compared to other data pools. He suggests the data be used to guide the review of standards, program planning, evaluation of policy and procedures, orientation of new employees, identification of inservice needs, research, and enhance motivation through awareness.

Duran (1979) suggests the use of Fault Free Analysis to identify the condition and circumstances under which incidents occur (Figure 2.2). The analysis can assist in identification of the relative liability of personnel and departments. Nursing staff can use the process to analyze their own accountability and advance suggestions to prevent a recurrence of the event.

Cournoyer (1985), Creighton (1981), Rabinow (1982), and Philpott (1985) encourage head nurses and supervisors to keep their own anecdotal accounts and statistical data regarding incidents in their areas. These can be compared with summary reports and audits. As well, staff nurses are encouraged to keep an account of all incident reports they complete. If called to testify in a lawsuit or hearing such accounts overcome memory lapses resulting from the passage of time.

Education. Summary data from incident reports should be used to identify various individual and group educational needs. Experts on quality assurance and risk management agree that education is the most important element in attaining a cohesive incident reporting process. The level



DATE: April 18, 1979

PATIENT INCIDENT:

Patient drank formalin solution with cataract in it. (Cataract specimen, preserved in formalin, was to be given to the patient to take home.)

DUE TO:

Lack of communication. (Patient was asleep when the volunteer took the specimen to the room and left it at the patient's bedside. When the patient awakened, she drank the formalin solution thinking it was medication left for her to take.)

DUE TO:

_____ Patient

_____ Mechanical Failure

X Nurse Failure

_____ Staff Shortage

X Other (Volunteer) (Pathology)

EXPLANATION OF PROBLEM:

Failure of head nurse to instruct volunteer on what to tell patient when she took specimen to the room.

1. Head nurse was too busy to adequately communicate.
2. Volunteer was not aware of potential danger.
3. Pathology brought the specimen to the nursing station and left it on the counter with no explanation.

ACTION TAKEN:

Physician and pharmacy called. Gave patient milk and eggs, lavaged, and given activated charcoal.

FOLLOW-UP:

Talked with pathology to make them aware of what occurred and the potential for reoccurrence. Pathology reminded to inform the head nurse when specimen is brought to the unit.

RECOMMENDATIONS:

1. Look at policy of routinely sending cataract specimens to patients to take home.
2. Require written order from physician if he wishes patient to have specimen.
3. When giving cataract specimen to patient to take home, explain what it is.
4. Do not leave at bedside without explanation.

Figure 2.2

Fault Tree Analysis

(Source: G. Duran, 1979:68)

Reprinted by permission from HOSPITALS, Vol. 53, No. 14, July 16, 1979: 68. Copyright © 1979, American Hospital Association.

of administrative commitment to quality assurance and risk management is reflected in the comprehensiveness and quality of a hospital's education programs.

Sharing incident report summaries with nursing staff involves them in generating ideas for reducing errors, accidents, and omissions in nursing practice. Awareness of legal hazards in patient care is also developed (Duran,1979; and Blake,1984). Hospital orientation programs should include an orientation to safety standards, fire and disaster protocols, hospital and personal liability, potentially injurious situations, safety measures, and corrective behaviours (Jones and Dodge,1980; Bryant and Korzak,1978; Monagle,1980; Stock,1986; and Stanton,1984). Completing a report should also be practised with an instructor. Jones and Dodge (1980) advocate comprehensive training sessions on incident reporting and its relationship to quality assurance.

Open forums allowing for an exchange of questions regarding risks, attitude problems, and the significance of reporting protocols should be periodically organized for all departments in the hospital. Well educated staff does result in lower incident rates, but if there is minimal reinforcement or follow-up in individual areas there is little probability of a permanent change (Wasuita,1982; Barker,1983; and Jones and Dodge,1980). Curtin (1981), Lanza (1985), and LaRocco (1985) also suggest individual counselling, and attention to stress factors in the work environment should be available. Gryzbek (1979) and Jones and Dodge (1980) advocate a comprehensive program for educating employees that is beyond basic orientation to forms and policies and emphasizes responsibility.

Along with Curtin (1981), Duran (1980), Brown (1983), Kinloch (1982), and Meisenheimer (1983:5) note that education and retraining are not the only corrective measures. It may be necessary to revise policies, procedures, standards or rewrite new ones, modify staffing patterns, equipment, and facilities in order to reduce the number of incidents.

Personnel evaluation. The literature acknowledges the negative image of incident reporting and the anxiety about the process that prevails among nurses. Richards and Rathburn (1983) advocate a severe penalty for anyone who fails to report an incident. Further to this the penalty must be more severe than the one for causing the incident and must apply to anyone with knowledge of the incident. Kinloch (1982) and Blake (1984) advocate the use of incident reports as an evaluation tool to correct attitudes, skills, and knowledge so as to improve individual nursing practice. It is important that the administrator look beyond the individual nurse to the environment. A nurse involved in an incident usually represents others who are equally unaware.

Remedial action based on incident reports should be positive not punitive (Curtin,1981; and Blake,1984). A climate of trust, honesty, and acceptance must be provided by management if responsible incident reporting is to occur. Such a climate is critical at the unit level.

The literature is explicit in advising that incident reports never be placed on a person's file. In instances where behavior is unethical or where malpractice exists the professional association should be advised. Incident reports should not be used to complain about other personnel. Grievance procedures are in place for this purpose.

Risk Management

Parker (1978) states that the goals of any risk management program are that they stress the need to strengthen systems for patient care and safety, as well as to strive to improve interpersonal relations among hospital patients, visitors, and staff. Barker (1983), Ashley (1977), Goodman (1979), Salman (1979), Langhill (1977) and Stock (1986) allude to and/or identify five essential elements of the risk management process: identifying, analyzing, investigating, remediating, and monitoring actual and potential risks. The process must facilitate the administrator's analysis of incidents and reduce, or eradicate the risk.

Bryant and Korzak (1978:42) identify six objectives of effective risk management:

1. Ongoing orientation sessions to patient care and practice standards and related hospital liability.
2. Reducing incidents through identifying appropriate remedial actions and developing preventative measures.
3. Promoting cost effective risk management. Poteet (1983) sees this as balancing the cost of remediation with the cost of the risk remaining.

4. Identifying potentially injurious incidents and procedures.
5. Increasing the level of patient satisfaction.
6. Standardizing fire and disaster calls.

Risk management committees. The literature emphasizes the importance of coordinating incident reporting information through a variety of committee structures. Historically, hospitals have had committees like Pharmacy, Safety and Security, Infection Control, Research, and Medical Practice to control quality and safety in the hospital. Risk management committees may be comprised of individuals from all these as well as having management, nursing, and legal representation (Wasuita,1982; Barker,1983; and Poteet,1983).

According to Salman (1979), risk management committees review all incident reports and statistical data arising from all hospital departments. Reports may be written or verbal. Committee members should conduct thorough investigations and make recommendations in a positive, analytical manner. Visibility, credibility, and accessibility are critical to the committee acquiring organizational support. He also suggests there be two separate risk management committees: medical, comprising nursing, physicians, pharmacy, and infection control personnel to review patient related incidents, and safety which reviews non-patient incidents.

Duran (1980) suggests that the nursing department have its own risk management committee with a particular focus on nurses' liability, legal seminars for nurses, and review of incident reports pertaining to patient care and nursing practice. Rozovsky (1979:101) advocates the involvement of the solicitor in staff conferences on the subject of incidents because it impresses upon the staff the possible legal implications of these occurrences. Salman (1979) agrees but suggests consultation must be measured against what is in the best interests of the hospital.

Van Sluyter (1979) suggests that a quality assurance committee review risk management committee activities. Along with Wasuita (1982), Bryant and Korzak (1979), Van Sluyter (1979) emphasizes the importance of both committees having the support and commitment of top management. Ashley (1977) and Van Sluyter also advocate establishing a line position for the committee in order to demonstrate administrative commitment.

Monagle (1980) outlines ten standards by which an effective risk management committee can be measured. These standards are directly related to the proper and successful use of the administrative process. Monagle observes that often after risk management information is collected, little or no follow-up is conducted and communicated nor are there any significant changes in departmental practices.

Orlikoff and Lanham (1981) and Fifer (1979) propose two different approaches to risk management: patient injury and patient safety. The former attempts to decrease patient injury; the latter seeks to improve the quality of care.

Both advocate investigation and prevention techniques.

Trendel-Korenchuks' (1983) criticism of most risk management programs is that they are reactive rather than preventative in response to incidents. As a result they advocate the patient safety approach to risk management. Monagle (1980) and Van Reenen (1983) also argue that risk management and quality asurance programs must be integrated for the purpose of eliminating duplication of the two efforts. Whatever the approach to risk management, the law implies serious implications if no action is taken. No action in itself might be considered negligence (Rozovsky,1979).

Risk managers. Many sources suggest that a humanistic, caring approach to incident investigation can avert a lawsuit. Monagle (1980), Creighton (1981), and Duran (1979) observe that lawsuits are a symptom of indifference and poor rapport between the patient and medical and nursing staff. Swartzbeck and Milligan (1979), Poteet (1983), Richards and Rathburn (1983), and Blake (1984) suggest one individual be appointed as a risk manager. A new position need not be created as a quality assurance coordinator might assume the role. Such a move reinforces administrative belief in the significance of risk management to the quality assurance program.

Parker (1978) prefers the terms ombudsman or patient advocate. His terminology reflects the concern of others that if incident reporting is to be honest, reliable, and effective, staff and patients must feel secure that expressed concerns are kept confidential and that they will not be punished for divulging information. Parker does not feel nurses can function effectivly as risk managers in patient related incidents because patients fear retaliation by nurses.

The trend to encourage professionalization of nursing and the assumption of greater individual accountability and responsibility includes the claim that the "professional nurse is to assume the role of patient advocate" (Abrams, 1978:258). Abrams (1978), Donahue (1978), and Storch (1982) indicate that the clinical-based nurse is not adequately prepared to act as an advocate or ombudsman because of a variety of bureaucratic structural, social, educational and behavioral constraints. These authors acknowledge that nurses have not been the best advocates and require a patient representative to intervene on their behalf. Blake (1984) sees nursing staff, particularly head nurses and supervisors, as important to the initial incident investigation process, but not necessarily as managers of a risk managment program.

The risk manager's, coordinator's, or ombudsman's role should include the filing, coding, compilation and routing of incident reports as well as activating immediate collaborative remedial action and implementing long range preventative strategies. The manager also serves as a resource person regarding incident reporting policies and procedures, liability and insurance coverage, and claims management. Duran (1980) advocates that risk managers be placed in line rather than staff positions in order to confer adequate authority, emphasize administrative commitment to risk reduction, and promote efficient and successful operation of the system.

Quality Assurance

Quality assurance and incident reporting are interrelated. Both aim to improve the quality of patient care, but the underlying motivating forces are different (Meisenheimer,1983; and Richards and Rathburn,1983). Orlikoff and Lanham (1981:54) identified areas of least overlap in the two programs according to purpose, focus, function, and process:

1. Purpose. Quality assurance programs aim to optimize patient care and performance of all hospital professions while risk management aims to protect and enhance the hospital's financial assets.

2. Focus. Quality assurance focuses on the quality of patient care. Risk management focuses on the prevention of financial loss arising from injury, damage or loss to patients, staff, and visitors.

3. Function. Quality assurance data sources determine if patient care is optimal while risk management data determines if standards are legally acceptable.

4. Process. Quality assurance uses audits, personnel appraisal systems, and professional and patient care standards to maintain or improve patient care. Risk management uses incident reports.

Barker (1983:21) notes that similarities also exist in that both systems depend on the nursing staff and physicians as data collectors.

Legal implications. Batty (1985) raises the question of whether the installment of quality assurance programs of which risk management activities are important components would expose hospitals to additional risk under vicarious liability.

The Rozovskys (1986) note that the following actions on the part of health care facilities may form the basis for litigation or augment a plantiff's claim:

1. Setting standards(policies, guidelines, procedures) that are not in accordance with average, reasonable, and prudent practice.
2. Developing standards which are too ambiguous or detailed that they cannot be successfully applied by practitioners.
3. Failing to transmit important patient information through appropriate channels.
4. Departing from quality assurance standards.
5. Failing to act on deficiencies and deviations identified through quality assurance programs.

As a consequence of elevated standards, hospital levels of accountability also increase, and hence the propensity to greater risks of duty founded in vicarious liability.

Factors Influencing Incident Reporting

Miesenheimer's (1983) and Van Meter's and Van Horn's (1977) criteria may assist the administrator in delineating possible sources of non-compliance with policy:

1. Knowledge: a deficiency in theory or technical information.
2. Performance: a deficiency in behavior or practice in spite of appropriate knowledge.
3. Systems: a deficiency in organizational, administrative, or environmental factors that prevent appropriate performances.

Bryant and Korzak (1978:43) delimited the following factors as contributing to non-compliance with policy:

1. Lack of institutional commitment from employees.
2. Absence of specific, concrete guidelines.
3. Lack of delegated authority for the risk manager to investigate incidents.
4. System perceived as a threat.
5. Lack of understanding of how the system works.

Fletcher (cited by Jackson and Lynch, 1985:307) indicates that a person's perception of the relationship between a risk factor and an outcome is influenced by a number of variables, including:

1. Long latency. The perceptual association between a risk and its subsequent outcome may be obscured by a prolonged interval.
2. Frequency of exposure. Some risk factors occur so frequently in a population that their danger is not recognized.
3. Low incidence. The relationship between the risk factor and serious outcome is seen so infrequently by individual practitioners that they may be unaware of their significance.
4. Complacency. If an incident is relatively common and some contributing factors are known, the discovery of a new risk factor is delayed due to less incentive to look for one.
5. Multiple causes. If there is not a clear one-to-one relationship between a risk factor and a specific outcome the interaction is not adequately investigated.

Joseph and Jones (1984) observe that the occurrence of an incident gives rise to some degree of insecurity in both employees and their immediate supervisors. Those involved fear discipline so there is an atmosphere of suspicion and distrust regarding open, honest reporting. Manthey (1980) observes that fear of committing errors has led nurses to believing a mistake is aberrant. The nursing profession has not learned how to deal effectively with the simple basic reality of human fallibility. There is a fear of the resulting consequences to employees, should they come forward (Duran,1979). Fear of being called incompetent or undermining the reputation of others, the area, or the institution is another concern. Some employees believe that a favorable relationship with their supervisor will be placed in jeopardy, and consequently, their chances for future promotion or other employment.

Barker (1962) observed that the existence in hospitals of sentiment against someone known to have been responsible for an error resulting in injury to a patient cannot be denied. Health professionals, having created an atmosphere of infallibility around themselves, are concerned that this is a minimum standard of practice and judge themselves and others accordingly. According to Barker, encouraging unattainable standards discourages the reporting of errors.

In stating their beliefs about quality assurance, the A.A.R.N. Bylaws (1986:1) state the "creation of an environment that promotes values clarification, risk taking, trust, and mutual respect in order to establish common goals" is key to attaining quality in patient care and nursing practice. Engel (cited by Fine,1982:107) stresses that professionalism is reduced by a bureaucratic environment and hence the quality of service rendered.

Manthey (1980) concurs. When professionalism is fostered, practitioners maintain self respect, form collegial relationships, act as patient advocates, and establish expectations for performance against preset standards. The head nurse's attitude toward hospital policy, rules, and regulations, mistakes, administration, and the profession determine the general atmosphere of nursing practice and social climate of the nursing area (Barrett,1975).

Curtin (1981:7) states, "If anyone thinks employees are commended for their honesty they are sadly deluded." She continues by saying that some physicians use incident reports to threaten employees, and copies are placed into employees' files and alluded to in evaluations. Rabinow (1982) counters that this does not occur. Others are not as positive as Rabinow about the reality of such practices and suggest they should not be used to evaluate employees. Poteet (1983) notes that incident report summaries can serve as motivators for staff in that no one wants to be associated with the area having the most incidents, but she does not advocate using individual reports as motivators for staff. Curtin (1981) charges that failure of institutions to provide a supportive and non-punitive environment for incident reporting is a result of a fear that substantial incident reporting may reflect upon their reputation.

The literature cites lawsuits which have demonstrated that incident reports have been falsified or incidents have not been reported. Rozovsky (1979) and Creighton (1981) state that for a nurse to falsify or not complete a report when required by policy is liable for negligence. The anxiety and guilt one feels in an error situation causes a nurse to cover-up or make light of what is a serious situation(Philpott,1985). In the final analysis, the effective implementation of incident reporting policy is the conscience and commitment of the individual nurse.

Review of Related Research

The following is a brief review of related research in health sciences administration, educational administration, nursing administration, nursing practice, and factors influencing nursing practice. The review also provides the rationale for the study, the sample, and the variables selected in this study.

Administration

Health sciences. Barker (1983) studied the incident reporting systems of three Alberta acute care hospitals to determine the extent of their use of incident reporting as a risk management tool. Barker states that many Canadian hospitals attempt to monitor their operational standards against those of professional, patient care, labor, and legal standards without the use of appropriate organizational structures critical to effective risk management and incident reporting. Problems he observed in the systems studied were that:

1. Most policies omitted a philosophy statement regarding the importance and commitment of the hospital administration to the system.

2. Most policies inadequately outlined the events that constitute an incident and require incident reporting.

3. There was inconsistency in the initiation of incident reports.

4. There was poor utilization and flow of incident reporting information.

5. There was little interdepartmental coordination of incident reporting information. Information is distributed for the purpose of communication but not for analysis and follow-up.

6. Information from reports was not directed to the development of education programs, policy and procedural changes, or alterations in hospital systems.

Education. Berman (1978) explains that differences between policy intent and actual practice result from a process of adoption and adaptation at the institution's local level. Mutual adaptation, according to Berman, occurs when delivery behaviors change to effectively comply with the policy needs of individual settings and organizational goals. If the needs of the local level are not met the policy may not be implemented, may be adapted to existing routines, may change behavior but not necessarily that required by policy, or the policy and deliverer undergo mutual adaptation. Berman suggests that institutional policy developers must ensure that mutual adaptation occurs at the local level.

Leithwood (1981) identified components of an educational program necessary to promote effective policy implementation. Leithwood contends that by identifying priorities among components and ensuring that structures representing them are in place, institutionalization or mutual adaptation of a policy will more likely occur. Otherwise, obstacles to implementation at the local level cannot be anticipated and corrected.

Lieberman (1982) contends that without a supportive environment practitioners cannot meet the expectations of institutional policy. Policies often dictate more than can be delivered in practical terms. If policy is to be mutually adapted, supportive, and open, communication must be fostered by administrators. Practitioners must also be responsible for articulating their own needs in relation to the implementation of policy expectations.

Nursing. Seward (1986) notes that in the bureaucracy, non-compliance with a supervisor's suggestion is undertaken by a subordinate only when the latter is convinced that he/she will be proven correct after all relevant facts are considered. An authoritative supervisor will receive fewer challenges about his/her decisions than a participative supervisor. In the former situation minimal or no creative problem-solving or risk taking will occur.

Johnson (1971) studied supervisors and head nurses in acute care settings to determine if the professional-bureaucratic behaviors of supervisors was emulated by the supervisor's head nurse subordinates. The degree of professionalization and bureaucratization of the respondent was measured by responses to policy, procedural, and administrative and professional demands. The results of the study indicated that supervisors and head nurses selected similar responses, although head nurses tended to be somewhat more professional than supervisors in policy categories and procedures. Johnson concluded that there was a role model influence by the supervisor over the head nurse. Johnson noted that either bureaucratic or professional decisions become the norm after a period of time.

Pelz (cited by Georgopoulous,1966) demonstrated that supervisors who cannot influence their subordinates' decisions and practices are less effective in influencing their supervisors in the overall chain of command. The study also concluded that individuals in different organizational positions tend to hold different attitudes, points of view, and values, and generally tend to have characteristically different perceptions of the social reality of the practice setting.

Nursing Practice

The focus of pharmacists Barker's (1961), Barker and McConnell's (1962), and Barker, Kimbrough and Heller's (1968) studies were the causes of medication errors in large, urban, active treatment medical centers in the United States. Previous studies of medication errors made by nurses had relied on self-report methods. Barker et al. (1968) point out that such methods rely on (1) someone being aware that an error has occurred, and (2) their willingness to report it. "Selective perception may affect the types of errors she perceives, selective recall the one she remembers, and motivational factors the ones she writes down" (Safren and Chapinis, cited by Barker, Kimbough, and Heller,1968:11).

In both studies Barker (1962) and Barker and his associates (1962,1968) estimated that approximately 50,000 medication errors occurred over a year for which only 36 official incident reports were filed. The researchers also found that approximately 36 percent of the errors not reported by nurses were errors the same nurses stated on a questionnaire should be reported. Barker and McConnell (1962) concluded that approximately 29 percent of nurses can be expected not to report medication errors of any kind. As a result, the researchers questioned the value of self-report methods for detecting errors.

Wasuita (1982), in the course of her data collection, also concluded that many errors went unrecognized as such by nursing staff. Duran (1979) describes the findings of a study of incidents in an emergency room of a large, active treatment hospital which showed approximately 70 percent of incidents went unreported.

Influencing factors. Wasuita (1982) notes that the particular climate of each institution can determine how openly incidents are reported. Wasuita observed that larger institutions reported fewer incidents than did smaller institutions. She cited, as possible reasons, that incidents are more commonplace and, hence, perceived as less important to report in the larger institution. There were also variations in safety features, staff attitudes in reporting incidents, perceptions of what comprises an incident, priorities placed on incident reporting especially when it is busy, staffing patterns, and numbers of permanent versus part-time employees. She cautions that high reporting rates does not necessarily mean that nurses are unsafe or that nurses on shifts with less incidents reported are dishonest.

Rowe's (1981) study revealed that nurses thirty years and older demonstrated a greater commitment to the profession than did nurses 29 and under. The study focused on 52 staff nurses in an Alberta acute-care hospital's medical-surgical and intensive care areas. Effects of educational route, age, length of employment, and commitment to professional/bureaucratic ideals, and role stress were studied. The study showed significant differences ($p<0.05$) in how the cited variables affected perceptions of actual and ideal work and patient care situations among nurses.

Corwin (1961) observed the effect of decision-making in a bureaucracy. Decisions made by the nurse in a bureaucratic setting must meet the approval of both administration and colleagues. Making errors tended to reflect negatively on self-concept and evaluation by others.

Corwin and Taves (1962) studied the professional and bureaucratic role conceptions of diploma nurses and degree nurses. They described professionalization as the nurse striving to maintain educational and professional standards through increased reading of professional literature, committee work, and participation in professional associations. Bureaucratization occurs through socialization into the institution with a focus on adminstrative and technical duties. Professional nurses' primary source of loyalties was the nursing profession while bureaucratic nurses' loyalties were the institution's authority and principles. They found that diploma nurses adhered to bureaucratic expectations more than baccalaureate nurses, and that baccalureate nurses educated outside the hospital had greater difficulty adjusting to bureaucratic expectations than those (diploma nurses) educated inside the hospital. They found that the type of educational tract was significantly related to the degree of commitment to professional role.

Hubernick and Alutto (1972) surveyed elementary and secondary school teachers and staff nurses to examine personal and role-related variables and their relation to commitment to the organization. They found that planning to seek advanced education was significantly related to commitment ($p<0.05$). Teachers and nurses who did not plan to seek further formal education exhibited higher levels of organizational commitment than respondents with plans for further education and respondents uncertain about their educational intention. These findings are consistent with research that shows that the desire for advanced education "implies professionalism or cosmopolitanism while lack of these intentions implies local orientations" (Hubernick and Alutto,1972:362). They also found a positive relationship between age, length of time in current area, and time in institution with organizational commitment. Younger subjects who had not invested a great deal in their careers were not as committed to their organizations as those whose careers were more fully developed. They also concluded that because teachers and nurses do not have strong professional ties that offer greater rewards than do organizations, they are not committed to them.

Nursing research on factors influencing nurses' moral judgments and decisions has added insight into nurses' deviation from standards in actual practice. Crisham (1981) presented six dilemmas, among them reporting medication errors, to a group of diploma, baccalaureate, and master's level nurses, students in a baccalaureate program and graduate studies, and a group of non nurses. She found diploma nurses scored significantly lower than nurses with higher education and lower than non nurses in moral judgment testing. Also nurses with less experience scored higher than more experienced nurses. The latter appeared more concerned with practical approaches to decisions. The more familiar with the dilemma the more principled the thinking became regarding a dilemma. Crisham questioned the influence of the environment in which nurses must make moral decisions. She observed that subjects imitated the moral judgment of others in their environment and different responses reflected different role model contingencies.

Educationally impoverished environments did not seem to encourage individuals to examine their views and actions thoroughly and systematically. Time constraints for expanded workload, opposing loyalties to profession, hospital and patient, and lack of clarity about their responsibilities and authority were cited as factors, combined with lack of educational resources and experience, affecting the higher level moral development of nurses.

Ketefian's (1981b) study of 79 nurses confirmed Crisham's findings. The nurses came from a variety of educational and work related backgrounds. Ketefian concluded that experience subverts the nurses' desire to practice ideals in reality. Cognitive development is necessary to enable the individual to reason about moral choices and eventually to make moral decisions. Hence, the significance of having higher levels of education. At the conventional level of moral development, the nurse is content with maintaining harmonious interpersonal relationships and institutional expectations. Collective morality prevalent among nurses has made it possible to blame others and ignore issues rather than accept personal responsibility. Ketefian believes that if nurses are to be accountable and responsible, a higher level of morality must be attained.

Greir and Schnitzler (1979) were interested in the relationship between level of education and the nurse's willingness to take risks in a simulation game of chance. The authors (1979:186) define risk taking as selecting an action the consequences of which could leave one in a worse position than prior to the action. They studied 75 nurses and non nurses where level of education was significantly different among the participants. They found that nurses with master's preparation were more willing than baccalaureate and diploma nurses to take risks based on their decisions and judgments. Diploma nurses were more conservative than both nurses and non nurses; and they were less confident in their decisions and judgments. The researchers concluded that nurses with low levels of achievement needs were less willing to accept risks, while nurses with high levels of education were better decision makers in situations depending on chance outcomes and nursing skill. In situations where information had to be acquired and used in making judgments, nurses did not differ according to educational level.

Conceptual Framework

The organization universe model provides a conceptual summary for the literature on incident reporting (Figure 2.3). The model may be used by the nurse-administrator to evaluate the overall institutional and/or departmental environment in which incident reporting occurs, and subsequently, to plan changes that would promote responsible and accountable implementation of incident reporting policies (Simms, Price, and Ervin,1985).

The principal components of the organization universe model consist of values, goals, structure, climate, and environment. Values, goals, structure, and climate comprise

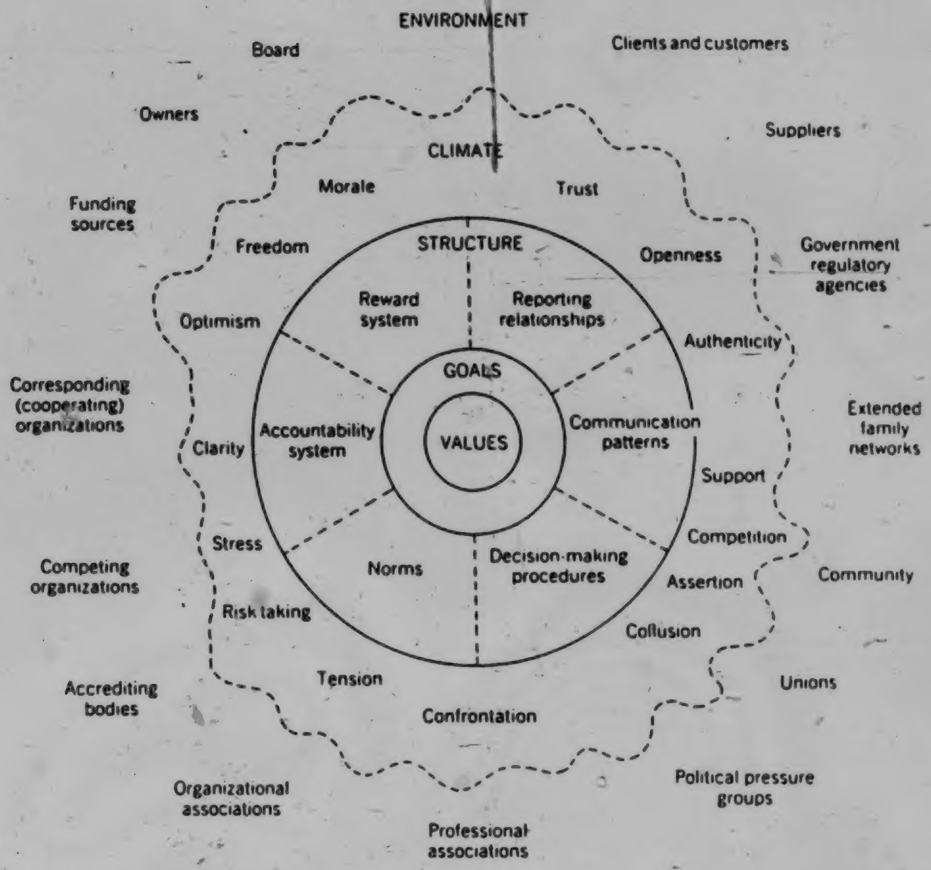

ENVIRONMENT
Board
Clients and customers
Owners
Suppliers
CLIMATE
Morale
Trust
Funding sources
Freedom
STRUCTURE
Openness
Government regulatory agencies
Reward system
Reporting relationships
Optimism
Authenticity
GOALS
Corresponding (cooperating) organizations
Accountability system
VALUES
Communication patterns
Extended family networks
Clarity
Support
Stress
Competition
Norms
Decision-making procedures
Competing organizations
Assertion
Community
Risk taking
Collusion
Tension
Unions
Accrediting bodies
Confrontation
Political pressure groups
Organizational associations
Professional associations

Figure 2.3

The Organization Universe Model

(Source: L. Simms, S. Price, and N. Ervin, 1985:57)
Reprinted by permission of John Wiley & Sons, Inc. Copyright ©
1985: 57. Copyright ownership.

the internal environment of the organization. The organization interacts with an external environment which influences the internal operation of the organization, the structures that comprise the organization, and the outcomes of the organizational activities.

Values are the core of the conceptual model. Values are reflected in the mission statement which defines the purpose for which the organization was established. Goals may be the values articulated, or the operational statements of the organization's or department's mission.

The structural component consists of the human, physical, and financial resources, processes (systems), and outcomes relevant to the implementation of the mission and goals of the organization and/or the department. Structure focuses on the conditions under which care or service is given and the effect that the conditions have on the quality and safety of patient care. Decision-making procedures, communication patterns, reporting relationships, reward systems, accountability systems, and group norms are conceptualized as the principal structural components.

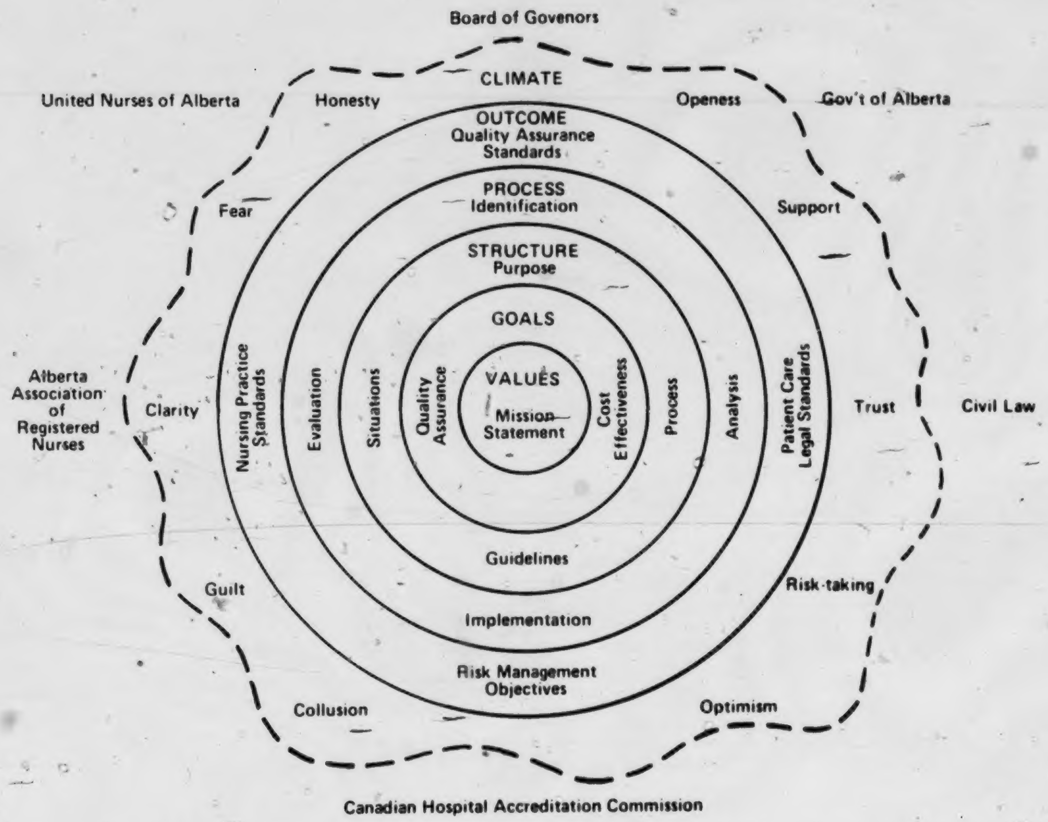
In order to facilitate a systematic assessment of the quality of care and services delivered to patients, health care institutions have focused on analysis of the individual elements of the structural component of the model. The structural component may be analyzed according to its major elements of structure, process, and outcome. Because the various elements are interrelated, like the major components of the model, each element can be arbitrarily interchanged without harming the concept.

The climate component is "the psychological atmosphere that results from and surrounds the operation of the structural component; it is both a result of and a determinant of the behavior of individuals and groups within the structure" (Simms, Price, and Ervin,1985:59). Climate may be part of the structural component as well as a separate component.

The outermost level of the model represents the external environment. The organization's internal environment must interact with the external environment in order to accomplish its mission.

Figure 2.4 shows the adaptation of Simm's et al. model to the process of incident reporting. The model shows the structural component divided into its three basic elements of structure, process, and outcome.

The hospital's mission is to promote the well-being of the patient, staff, and visitor by ensuring a safe environment and to maintain a commitment towards cost-effective health care delivery. The goals of quality assurance focus on direct patient care while risk management focuses on controlling risk factors which may increase the cost of patient care. Cost effectiveness and quality assurance are interrelated. Risk management is a component of quality assurance. Incident reporting is the cornerstone of risk management.



Board of Govenors
United Nurses of Alberta
Gov't of Alberta
Alberta Association of Registered Nurses
Civil Law
Canadian Hospital Accreditation Commission
CLIMATE
Honesty
Openess
Fear
Support
Clarity
Trust
Guilt
Risk-taking
Collusion
Optimism
OUTCOME
Quality Assurance Standards
Nursing Practice Standards
Patient Care Legal Standards
Risk Management Objectives
PROCESS
Identification
Evaluation
Analysis
Implementation
STRUCTURE
Purpose
Situations
Process
Guidelines
GOALS
Quality Assurance
Cost Effectiveness
VALUES
Mission Statement

Figure 2.4

Conceptual Model for Incident Reporting

Incident reporting policy is a structure which provides guidelines for decision-making and nursing practice regarding the safety of patients, visitors, and staff while on hospital property. Quality assurance standards are implicitely incorporated into the policy purpose, guidelines, situations, and reporting process for incidents.

Continuing education programs, performance appraisals, nursing audits, care plans and report forms, summary reports, and risk management committees are some examples of structural elements that ensure continuity, stability, and uniformity in implementing incident reporting policy and processing incident report information.

Four broad process elements comprise the risk management program. When incident reports are completed, the information may be used to identify the source of risk or injury, analyze the frequency and severity of the incident, implement remedial action to eliminate or reduce the risk, and evaluate through continuous monitoring the effects of risk management.

Outcomes of the structural and process elements of the conceptual model are assessed according to nursing practice standards, quality assurance standards, patient care legal standards, and risk management objectives. Data collected from the process element are compared to predeveloped standards and criteria which specify respectively the desired level of performance and indicate the quality of care provided. Revising policies, procedures, and report forms; re-structuring committees, re-educating staff, and re-defining patient care outcomes are some of the activities undertaken to ensure the goals and mission related to quality and cost effectiveness are attained. Outcomes generate ongoing evaluation of all the other levels of the conceptual model.

Climate is the psychological component of the conceptual model. According to the literature, nurses are anxious and uncertain regarding the safety of open and honest incident reporting. Supportive relationships with superiors and colleagues, openness of communication, trust, clarity of expectations, and an accepting attitude toward risk taking and problem solving are critical to establishing a climate conducive to open and honest incident reporting.

Numerous regulatory, governing, cooperating, and monitoring external organizations challenge the hospital's capacity to fulfill quality assurance standards with the resources allocated. The provincial and federal governments regulate the funding available for providing health care services. The Alberta Hospital Act contains the statutes regulating hospital operations, while the Nursing Profession Act (1983:11) has as a goal "to establish, monitor, and approve standards of nursing care." The C.C.H.A. assesses the operation of the hospital against pre-determined national quality assurance standards.

In order to maintain its programs and funding privileges the hospital must show evidence that it is able to meet these standards. The nurses' professional organization (A.A.R.N.) has developed standards of nursing practice which require nurses to respect statutes and policy relevant to the practice setting. The law defines the limits and scope of nursing and medical practice, patient rights, and hospital responsibilty and is implicitly and explicitly incorporated in all previously mentioned standards and criteria used to evaluate the health care system. Collective bargaining promotes quality assurance through establishment of working conditions conducive to harmonious employer-employee relationships. Finally, the board of governors through its leadership and guidance ensures that the hospital's mission, goals, and objectives are met according to governmental, regulatory, and legal standards.

Summary

This chapter has reviewed the theoretical and research literature in order to provide the framework for the study. Specifically, the purposes, situations, guidelines, processing, and influencing factors related to incident reporting were developed in the literature review. The review of the relevant research presented the rationale for the study design and methodology as well as the dependent variables. A conceptual model for the organization of incident reporting was developed from the principal components of the literature review and the organization universe model.

An accurate definition of an incident is important to the policy and initiation of the incident reporting process.

The key to effective incident reporting is that an incident be perceived as such along with its legal, financial, and qualitative implications.

The primary purpose of incident reporting is to advise administration of actual and potential risks that may place the organization at a financial disadvantage. It is important to the incident reporting process that its purpose be clearly understood by those responsible for implementation at the local level.

Situations requiring incident reporting may go unreported by nurses because they are uncertain as to what comprises an incident, unaware that they have caused an error, or because they are unaware of their liabilty in certain situations. Causation theory explains that incidents do not necessarily occur in the presence of unsafe practices or conditions. Consequently, the theory is important to the principles surrounding investigation and analysis of incidents.

Guidelines for incident reporting should be comprehensive and detailed in order to ensure that information is easily accessed for analysis and investigation. A checklist format best facilitates this objective. However, as a quality assurance tool, some experts believe the incident form should solicit as much information regarding the incident as possible. Accurate, nonjudgmental, discriptive narratives are legal requirements. Controversy exists as to whether nurses should document subjective remarks on the report form. Legal consensus advises against documenting the completion of an incident report on the nurses' notes.

The minimal requirements for effective incident report processing includes identification, analysis, remedial action, and evaluation of incidents reported. Hospitals have attempted to implement this process without the use of appropriate organizational structures. Experts on incident reporting agree that education programs based on risk prevention are important adjuncts to the operation of an effective risk management program. Attaining full cooperation from nurses in reporting incidents is a difficult task due to the professional myth that ignores the basic reality of human fallibility. The nurse's immediate supervisor has a significant impact on attitudes toward risk-taking and consequently the reporting of errors. Without the staff nurses' participation, an integrated and coordinated risk management program, quality assurance, and risk and cost reduction cannot be achieved.

The organization universe model conceptualizes the components necessary for an effective incident reporting system. The model enables the nurse-administrator to evaluate the system and to plan changes that promote accountable and responsible nursing practice.

CHAPTER 3

Research Design, Methodology, and Profile of Respondents

This chapter presents a description of the study design, methodology, and a description of the personal and professional variables of the respondent groups.

Research Design

The purpose of the study was to describe nurses' perceptions of incident reporting and factors influencing their perceptions of reporting. A review of the research literature indicated that little is known empirically about nurses' perceptions of incident reporting (Brink and Wood,1983). A survey obtains information regarding the prevalence, distribution, and interrelations of variables within a population (Polit and Hungler,1985). Descriptive designs result in description of data and whether the data analysis shows statistical relationships (Borg and Gall,1983). This was the objective of examining personal and professional variables in relation to incident reporting. Borg and Gall (1983) suggest that exploratory research can be useful in generating observations and hypotheses in areas where little prior investigation has occurred and where more objective methods are not available.

The Research Instrument

Development of questionnaire. The questionnaire can be a valuable research tool in surveys, especially when questions are personal or sensitive or when they examine socially undesireable behavior, because confidentiality can be assured (Sudman and Bradburn,1983). Information obtained from surveys tends to be relatively superficial. Questionnaires cannot probe into contradictions of human behavior and feelings and are suited to extensive rather than intensive analysis (Polit and Hungler,1985). Sudman and Bradburn (1983:17) corroborate this opinion in stating:

> Questions about psychological states or attitudes . . . are not verifiable even in principle since states of attitudes exist only in the minds of individuals . . . and are directly accessible . . . only to the individuals concerned.

Treece and Treece (1986) caution that even factual data are not reported accurately in questionnaires.

The questionnaire was selected for this study because of its advantages: rapid and efficient data collection, ease of analysis and interpretation of data, elimination of researcher bias, and cost effectiveness. The instrument also satisfies the purpose of the study.

Items for the questionnaire were generated from the literature and from colleagues presently employed as staff nurses, nurse-educators, nurse-administrators, and from graduate students in nursing and education programs. The 170 items generated in this manner were grouped according to the researcher's perception of the concepts evolved from the literature: demographic variables, purposes, situations, guidelines, processing, and factors influencing incident reporting. A final section was added to summarize nurses' overall perceptions related to the purposes, situations, guidelines, and processing of incident reports. Closed ended questions were used to obtain responses although some authors caution that such structure is undesirable in attempting to solicit information regarding undesirable behavior or opinions regarding sensitive topics (Treece and Treece,1986; and Sudman and Bradburn,1983). A Likert scale was used for response choices. Likert scales allow for fine discrimination among persons with different points of view (Polit and Hungler,1985). Questions were worded in such a manner as to solicit the individual nurse's perceptions of the current practice of incident reporting in her/his area.

The first drafts of the questionnaire were sent to ten experts for review. These included four staff nurses, two nurse-educators, two nurse-supervisors, and two nurse-consultants and a research coordinator. Reviewers were asked for their comments on the completeness of the list of items, the clarity of the wording, suitability of the questionnaire format, and additional items for inclusion. As a result of feedback from the panel, some items were reworded or simplified, and the total was reduced from 170 to 164. An "uncertain" option was added to purposes, guidelines, and processing sections.

The revised drafts were sent to a hospital administrator, a director of nursing, and a senior nurse-executive for their comments regarding the appropriateness of the items. The language was again clarified and the format of the questionnaire improved. This process helped to ensure the face and content validity of the questionnaire. That is, the instrument measured what it was supposed to measure, and the items were representative of the components of incident reporting in the hospital setting being studied.

Construct validity was addressed to some extent in that experts reviewing the questionnaire were asked to validate the items under factors influencing incident reporting. The literature also identified several factors influencing incident reporting. Treece and Treece (1986:263) state that one method used for testing construct validity of an instrument is to "utilize a group of independent judges who observe and record evidence of the subject's behavior in situations that spell out the concept in operational terms."

Predictive and concurrent validity were not addressed. The instrument does not purport to accurately measure future or current perceptions and behavior in incident reporting because the reliability of the overall instrument was not established. Future testing with the instrument would be required to determine the predictive and concurrent validity of the study.

Questionnaire content. A questionnaire based on available literature and the observations of a panel of experts was used as the data collection tool. The questionnaire was divided into nine sections (Appendix B).

Section I and II deal with personal and professional data including age, position, area of nursing practice, nursing experience in current position, area of nursing practice, and profession; level of education, continuing education activities, professional involvement, experience with incident reporting, and type of patient care delivery system. It was thought that these variables might influence nurses' perceptions of incident reporting.

Section III deals with nurses' perceptions of the purposes of incident reporting. Respondents were asked to differentiate between the actual and ideal purposes of incident reporting in their area and/or in the hospital. The response rating is:

1. Strongly Disagree
2. Disagree
3. Uncertain
4. Agree
5. Strongly Agree

Section IV deals with nurses' perceptions of situations requiring incident reporting. The response scale is:

1. No
2. Yes
3. Uncertain

Section V deals with nurses' perceptions of the frequency that guidelines for completing incident reports are practised by themselves or other nurses in their area and/or in the hospital. The response scale is:

1. Never
2. Rarely
3. Frequently
4. Always
5. Uncertain

Section VI deals with nurses' perceptions of the processing of incident reports. Respondents were asked to differentiate between actual and ideal processing of an incident report as it occurs in their area and/or in the hospital. The response rating was the same as for Section III.

Section VII deals with nurses' perceptions of factors influencing their own or others' decision to complete an incident report in their area and/or in the hospital. The response rating was the same as Section III.

Section VIII summarizes nurses' overall perceptions of incident reporting. A scale of one to five was used. Space was provided for additional comments about incident reporting.

Pilot of questionnaire. A pilot test of the questionnaire was conducted in a different hospital on two gynecology nursing units. The questionnaire was distributed to twenty registered nurses, two unit supervisors, and an assistant director of nursing. Respondents were asked to complete the questionnaire noting the clarity of the instructions, clarity of the items, appropriateness of the response scales, and time needed to complete the questionnaire.

Responses were received from fifteen (75%) of the staff nurses, both unit supervisors, and the assistant director of nursing. Frequency distributions were completed for each item in the questionnaire and any comments were noted. Some adjustments were made in directions and wording of items.

Although the questionnaire took most respondents thirty to forty-five minutes to complete the length was not adjusted. "On highly salient topics and with well educated respondents, questionnaires twelve to sixteen pages are possible without serious losses in cooperation" (Sudman and Bradburn,1983:227). The time for completion cited by respondents was also considered to be due to time taken to make corrections and comments on the content and format.

Interview. Interviews (Appendix C) were conducted with the Director of Nursing and Quality Assurance Coordinator to obtain descriptive data regarding the organization and nature of incident reporting as it occurred in the hospital setting. The Director and Coordinator were contacted by letter requesting their participation in the interviews (Appendix D). The purpose of the study and interview were explained, and the proposed questions were included:

1. What is the purpose of the policy(policies) on which the current incident reporting system is based?
2. How long has the current system been in place?
3. Briefly describe the incident reporting system as it operates in this hospital. What are the principal components?
4. Describe your role in the incident reporting system in this hospital.
5. From whom do you receive incident reports?
6. What happens to the report once it passes through the system?
7. Describe the ways information provided by incident reports is used.

8. What do you perceive as barriers to incident reporting in this hospital?

9. What do you perceive as facilitators to incident reporting in this hospital?

Following the interview a summary transcript of the discussion was submitted to the interviewees for editing and additional comments.

Research Methodology

The Director of Nursing of the hospital in the study was contacted by letter introducing the researcher, presenting the research proposal, and requesting permission to conduct the study in the hospital (Appendix E). Approval to conduct the study was provided by the Management Committee, Hospital Administrator, and Director of Nursing. The Staffing Coordinator provided the staffing lists for the medical, surgical and surgical specialities, and intensive care areas in the hospital. The staffing lists also included the unit supervisors (US) and assistant directors of nursing (ADN) for each area.

From the 281 full-time, registered staff nurses (RN) employed in the areas studied, 200 RN were randomly selected using the staffing lists. Prior to the sampling procedure it was determined that 34 percent of the nurses in the population were employed in medical patient care areas, 50 percent were employed in surgical patient care areas, and 16 percent were employed in the Intensive Care Unit (ICU). In selecting participants for the study, random sampling was done to ensure that the different areas were represented in the final sample in proportion to the population from which they were taken. The final sample of RN consisted of 68 medical nurses, 100 surgical nurses, and 32 ICU nurses. All the US and ADN of the areas studied were included. The final sample totaled 200 RN, 21 US, and 4 ADN.

US and ADN were informed of the study by the Director at a scheduled meeting. Letters were sent by the researcher to all US and ADN informing them of the purpose of the study, how it would be conducted, and the project deadlines (Appendix F). They were requested to inform their staff nurses of their participation.

The questionnaires, enclosed in an envelope addressed with the participants' names, were distributed to each unit by the researcher or the ADN for the area. The US ensured that the participants received their copy of the questionnaire. A covering letter explained the purpose and content of the questionnaire (Appendix G). Anonymity of individual responses was assured. Respondents were requested to place the completed questionnaire in an enclosed envelope and either deliver the completed form to the central nursing office personally, or to give the completed form to the unit clerk to deliver it to the same location. Returns were collected from the nursing office by the researcher.

Seven days after the date the questionnaires were distributed a follow-up letter was sent to all participants thanking them for their assistance, and reminding them to return the completed forms if they had not already done so (Appendix H). Completed returns at that time averaged 55 percent. Approximately ten days following the first letter another was sent with the tabulated returns from each area enclosed (Appendix H). Additional copies of the questionnaire were made available through the central nursing office for those who had misplaced originals. The researcher was able to effect further returns during a presentation for the hospital's promotional week on nursing research. The researcher also approached each unit supervisor regarding copies of the questionnaire that may have been completed but had not found their way to the nursing office.

Of the 213 questionnaires distributed, 158 or 74.2 percent were returned. (It should be noted that of the 200 questionnaires distributed to the RN group only 188 were received by the respondents. Twelve of the participants selected were either on leave of absence, holidays, had terminated employment, or transferred to other areas not included in the study. Consequently, they were automatically excluded from the number sampled.) Table 3.1 summarizes the distribution and return of the questionnaires based on 213 questionnaires distributed.

Data Processing

Raw data were transcribed directly from the questionnaires to computor data cards. The Statistical Package for the Social Sciences (SPSS) was used for analysis of the data as follows:

TABLE 3.1

Distribution and Return of Questionnaires According to Current Area of Practice

Position and Nursing Area	Questionnaires Distributed	Questionnaires Returned	Percentage Returned
Staff Nurse			
Medicine	68	52	76.5
Surgery	86	58	67.4
ICU	34	26	76.5
Total	188	136	72.3
Unit Supervisor			
Medicine	7	7	100.0
Surgery	12	9	75.0
ICU	2	2	100.0
Total	21	18	85.7
Assistant Director of Nursing			
Medicine	1	1	100.0
Surgery	2	2	100.0
ICU	1	1	100.0
Total	4	4	100.0
Total	**213**	**158**	**74.2**

1. Frequency and percentage distributions were calculated for each variable in the questionnaire.

2. Using the frequency distributions for independent demographic variables as a guide, data were regrouped and collapsed in the following areas where frequencies were too low to make useful comparisions:

   a. The age variable was reduced from five to three categories.
   b. US and ADN groups were combined under a "nurse-supervisor" category.
   c. General surgery and surgical specialties were combined under "general surgery" category.
   d. Years in current position, current nursing area, and professional variables were each collapsed from six categories to three.
   e. Previously held positions was collapsed from five categories to three.
   f. Six variables related to professional behavior were combined and collapsed into two categories and formed one variable titled "professionalism." First the frequency of attendance at inservice had to be organized to form two categories: i) 0 to 3 a times year and, ii) 4 and more times a year. This made coding compatible with the remaining five professional variables. The six professional variables were then divided into two categories based on a mean of 1.50: i)those 1.50 and above, ii) those below 1.50. Above the mean expressed a lesser degree of "professionalism," while below the mean expressed a greater degree of "professionalism."

3. Analyses using the t-test were performed to determine significant differences by independent variables in the means of the perceptions of purposes, guidelines, processes, and factors in incident reporting. The t-test was also used to determine significant differences between the means of actual and ideal purposes and processing of incident reports.

4. One-way analysis of variance and the Scheffé procedure were used to determine significant differences by independent variables involving three or more groups in the means of the perceptions of purposes, guidelines, processes, and factors in incident reporting.

5. Chi Square analysis was used to determine significant differences in frequencies of demographic variables for staff nurses and nurse-

supervisors. Chi Square analysis was also used to determine significant relationships between independent variables and situations requiring incident reporting.

Findings for Personal, Professional, and Situational Variables

Personal and Professional Variables

Personal and professional variables of the staff nurses were compared to those of the nurse-supervisors. A Chi Square analysis was used to test the significance of the observed differences. Nominal and ordinal categories were developed using the headings current position, area of nursing practice, years in current position, area of nursing practice, and profession, and other positions held. Working towards a degree, attending inservice and frequency of same, reading journals, belonging to professional groups, and participating in research were collapsed to form the independent variable "professionalism." The means of each category for the two nurse groups were cross tabulated for analysis.

The Chi Square test is a nonparametric statistic used when variables are expressed in nominal and ordinal scales and when data are expressed in the form of frequencies (Treece and Treece,1986:435). Nonparametric statistics do not assume a normal distribution of scores about the population mean nor the homogeneity of variances of the comparison groups (Borg and Gall,1983). Chi Square analysis tests for differences between known frequencies of a sample and frequencies which might be found for a theorized population. Sample frequencies within a specific category of a variable are contrasted with the expected distribution in the theoretical population. If a marked difference exists between the frequencies in each category then the Chi Square test will yield a value large enough to be interpreted as significant ($p \leq 0.05$). The null hypothesis is rejected. The null hypothesis states that there is no difference between the two groups and variables in the two groups are not independent (Erickson and Nosanchuk,1977).

An examination of the Chi Square values for the comparison of staff nurses and the nurse-supervisors revealed significant differences ($p \leq 0.05$) on the following variables: age, years in current position, years in current area of nursing practice, years in nursing profession, other positions, level of education, working towards a degree, reading nursing journals, membership in a professional group, and participation in nursing research. In each case the null hypothesis was rejected; the two groups were different on these independent variables as shown by the asterisks in Table 3.2.

Statistically the above findings were to be expected. The two groups differed in the focus of their job activities and their position in the organizational hierarchy: the staff nurse's work domain was the implementation of patient care activities, while the nurse-supervisor's work domain was the administration and supervision of the implementation of patient care activities. The groups were similar in their distribution on the following variables: area of nursing practice, other positions held, inservice attended within the last year, and frequency of attending inservice.

Table 3.2 shows that 76 percent of the staff nurses surveyed were thirty years old or younger, while 86 percent of the nurse-supervisors were thirty-six years old or older. None of the nurse-supervisor group was twenty-five years and under. Compared to nine percent of the staff nurse group between thirty and thirty-five years, ten percent of the nurse-supervisor group belonged to this category.

Approximately 39 percent of staff nurses surveyed worked in general medical areas, 44 percent in surgery, and 17 percent in the intensive care area. Of the nurse-supervisor group 36 percent worked in medical, 50 percent in surgical, and 14 percent in the intensive care area.

Regarding the number of years in current position, 87 percent of the staff nurses had been in their position for six years or less, while only 45 percent of the nurse-supervisors had been in their position six years or less. Approximately 32 percent of the nurse-supervisors had been in their position seven to twelve years and 23 percent, over twelve years. About seven percent of staff nurses had seven to twelve years experience, and seven percent had over twelve years experience.

Although none of the nurse-supervisors had worked in the current area of practice less than one year, 29 percent of the staff nurses fell into this category. Approximately 32 percent of the nurse-supervisors had practised in their

TABLE 3.2

Frequency and Percentage Distribution of Personal and Professional Variables for Staff Nurses and Nurse-Supervisors

Independent Variable		Categories				
Age***		<26	26 to 30	31 to 35	36 to 40	>40
Staff Nurse[a]	F	53.0	37.0	13.0	14.0	19.0
	%	39.0	27.2	9.6	10.3	14.0
Nurse-Supervisor[b]	F	-	1.0	2.0	7.0	12.0
	%	-	4.5	9.1	31.8	54.5
Area		**Medicine**		**Surgery**		1CU
Staff Nurse	F	53.0		60.0		23.0
	%	39.0		44.0		16.9
Nurse-Supervisor	F	8.0		11.0		3.0
	%	36.4		50.0		13.6
Years in Position***		<1	1 to 6		7 to 12	>12
Staff Nurse	F	41.0	77.0		9.0	9.0
	%	30.1	56.7		6.6	6.6
Nurse-Supervisor	F	1.0	9.0		7.0	5.0
	%	4.5	40.9		31.8	22.7
Years on Area***						
Staff Nurse	F	39.0	79.0		15.0	3.0
	%	28.7	58.1		11.0	2.2
Nurse-Supervisor	F	-	7.0		4.0	11.0
	%	-	31.8		18.1	50.0
Years in Profession***						
Staff Nurse	F	23.0	70.0		22.0	21.0
	%	16.9	51.5		16.2	15.4
Nurse-Supervisor	F	-	-		1.0	21.0
	%	-	-		4.5	95.5

(continued ...)

TABLE 3.2

Frequency and Percentage Distribution of Personal and Professional Variables for Staff Nurses and Nurse-Supervisors

(continued)

Independent Variable		Categories			
Other Positions***		US	ADN	Educator	Other
Staff Nurse[a]	F	8.0	3.0	1.0	7.0
	%	5.9	2.2	0.7	5.1
Nurse-Supervisor[b]	F	11.0	4.0	5.0	3.0
	%	50.0	18.2	22.7	13.6
Education*		RN		BSc	Other
Staff Nurse	F	124.0		11.0	1.0
	%	91.2		8.1	0.7
Nurse-Supervisor	F	17.0		3.0	2.0
	%	77.3		13.6	9.1
Obtaining Degree*			Yes	No	
Staff Nurse	F		13.0	123.0	
	%		9.6	90.4	
Nurse-Supervisor	F		6.0	16.0	
	%		27.3	72.7	
Reads Regularly*					
Staff Nurse	F		72.0	64.0	
	%		52.9	47.1	
Nurse-Supervisor	F		18.0	4.0	
	%		81.8	18.2	
Professional Membership**					
Staff Nurse	F		31.0	105.0	
	%		22.8	77.2	
Nurse-Supervisor	F		11.0	11.0	
	%		50.0	50.0	

(continued ...)

TABLE 3.2

Frequency and Percentage Distribution of Personal and Professional Variables for Staff Nurses and Nurse-Supervisors

(continued)

Independent Variable		Categories	
Research Participation*		Yes	No
Staff Nurse	F	16.0	119.0
	%	11.9	88.1
Nurse-Supervisor	F	7.0	15.0
	%	31.8	68.2
Inservice Attendance			
Staff Nurse	F	127.0	9.0
	%	93.4	6.6
Nurse-Supervisor	F	22.0	-
	%	100.0	-
Inservice Sessions/Year		0 to 3	4 & Over
Staff Nurse	F	65.0	69.0
	%	48.5	51.5
Nurse-Supervisor	F	9.0	13.0
	%	40.9	59.1

[a] $N = 136$

[b] $N = 22$

*** $p \leq 0.001$

** $p \leq 0.01$

* $p \leq 0.05$

current area for one to seven years, 18 percent for seven to twelve years, and 50 percent over twelve years. Approximately 58 percent of staff nurses had practised in their current area for one to seven years, 11 percent for seven to twelve years, and two percent for over twelve years. Table 3.2 shows that 96 percent of the nurse-supervisors had worked over twelve years in the nursing profession compared to approximately 15 percent of the staff nurses. Approximately 17 percent of staff nurses had worked less than one year in the profession, 52 percent for one to six years, and 16 percent for seven to twelve years. Only one nurse-supervisor worked in the nursing profession for less than twelve years. Of the nurse-supervisors with nursing experience over twelve years, 50 percent had spent that time in their current area of expertise.

Table 3.2 also shows other positions that the two nurse groups held. Approximately six percent of the staff nurses had been unit supervisors, three percent ADN's, and one percent had been nurse-educators. Fifty percent of the nurse-supervisor group had held other unit supervisor positions, and 23 percent held nurse-educator positions.

Staff nurses and nurse-supervisors differed significantly regarding their highest level of education. Approximately 91 percent of staff nurses and 77 percent of nurse-supervisors had a RN Diploma as the highest level of education. Baccalaureate degrees were held by eight percent of staff nurses and fourteen percent of nurse-supervisors. Other degrees/diplomas were held by one percent of staff nurses and ten percent of nurse-supervisors. Of the staff nurses, ten percent were currently working towards a nursing degree, while 27 percent of nurse-supervisors were in this category.

All nurse-supervisors and 94 percent of staff nurses had attended inservice sessions in the past year. Approximately 52 percent of staff nurses and 59 percent of nurse-supervisors attended inservice four or more times per year. Nurses also differed according to the number of nursing journals regularly read. Of the staff nurses, 53 percent regularly read nursing journals other than Canadian Nurse, while 82 percent of the nurse-supervisors reported the same.

Approximately 23 percent of staff nurses belonged to some professional interest group or committee, while 50 percent of nurse-supervisors were in this category. Approximately 12 percent of staff nurses had participated in nursing research over the past year, while 32 percent of nurse-supervisors were in this category.

A comparison was made between the mean scores of the two nurse groups and the independent variable "professionalism." The "professional" score was computed using the scores of currently working toward a nursing degree, attending inservice sessions (and frequency of same), reading journals, belonging to professional groups, and participating in nursing research. The mean score of nurse-supervisors was significantly higher than the score of staff nurses.

Data related to type of nursing care delivery system in the area were not compiled due to conflicting responses from both nurse-supervisor and staff nurse groups. The nursing department was in the process of adopting a "modified primary nursing" approach to nursing care replacing the current patient care mode, team nursing. The primary nursing concept supports decentralization of authority, responsibility, and accountability, while team nursing promotes centralization of authority.

Experience completing an incident report should have some effect on nurses' perceptions of incident reporting. Except for one staff nurse, all the nurses surveyed have had experience completing an incident report, either as a staff nurse or as a student nurse. Therefore, this variable was also deleted in later analyses.

Discussion. The information obtained under personal and professional data indicated that the majority of staff nurses were younger than nurse-supervisors. This finding correlates positively with nurses' experience according to years in current position, in area of nursing practice, and in the profession.

These findings, although statistically significant, were not unexpected. Bureaucratic organizations like hospitals traditionally reward employees with extensive experience and service in the institution with promotions to higher line and staff positions. Hubernick and Alutto (1972) found a positive relationship between age, length of time in area and institution, and commitment to the institution. Rowe's (1981) study also found a positive relationship between increasing age and commitment to the organization. Commitment is characterized by a strong belief in and acceptance of organizational goals and values, a willingness to work towards these goals, and a desire to remain in the organization (Steers,1981). In this sample, one would expect nurse-supervisors to be more supportive of and compliant with incident reporting policies than staff nurses.

A variety of work experiences is common among nurses. The nurse-supervisor group had previous experience as unit supervisors and as assistant directors of nursing. Considering the average age and experience of the staff nurse group, it was not surprising that a small minority had experience as nurse-supervisors. Experience in the form of maturity, time, and variety of employment provides an informal education for employees. If acquired over a period of time in one organization, experience provides for an indepth education on the culture and idiosyncracies of operation for that organization. Nurse-supervisors in the sample tended to have these advantages. Research has shown that individuals in different organizational positions (or that have held a variety of positions) tended to have different perceptions of the realities of the practice setting due to different attitudes, viewpoints, and values (Georgopoulous,1966).

The majority of nurses in this survey did not have additional education or a baccalaureate or a Master's degree. In hospitals, nurses with extensive work experience have better opportunities to compete for senior administrative positions because experience is as valuable as advanced education. Many nurses in hospitals are able to achieve their career aspirations without having had additional postsecondary educational preparation.

In considering the administrative skills required by nurses, the Alberta Task Force Report on Nursing Education (1975) recommended the minimal educational requirement for all nurses be a Bachelor's Degree in Nursing. Head nurses and assistant head nurses require a broad base of knowledge, education, and practice on which to base decisions and actions. Their competence should be based on extensive clinical practice, leadership, teaching, counselling and research. Positions at the ADN level and beyond require Master's and Doctoral preparation. The Task Force felt it important that these latter nurses be prepared to develop organizational structures and systems of patient care delivery that would facilitate quality asssurance and the professional development of nurses at all levels of the organization (Task Force,1975). In addition, the "Entry To Practice" position of the A.A.R.N. and C.N.A. has created a mandate stating that by the Year 2000, the minimal educational requirement for all nurses will be a baccalaureate degree. Hubernick and Alutto (1972) found that nurses seeking higher formal education were less committed to organizational goals and values than were those nurses who had such intentions. Crisham (1981) and Ketefian (1981) showed that nurses with advanced formal education were able to reason better than were diploma nurses about moral-ethical choices in decision-making situations. Ketefian also concluded that work experience tended to subvert nurses' desires to practice ideals in reality. As such, nurse-supervisors in this sample should be more willing to operate within the constraints of bureaucratic rules and regulations than the staff nurses.

Corwin's (1962) classic studies have shown that diploma nurses educated in hospital programs tended to be more bureaucratic in their ideals than baccalaureate nurses in their ideals. Because diploma programs in colleges did not exist at the time of Corwin's studies, his findings could not be generalized to those nurses.

On individual categories of professionalism, both groups' overall scores were average, although nurse-supervisors tended to be more professional overall than were staff nurses. Hubernick and Alutto (1972) noted that nurses in hospitals do not express strong affiliation with external professional groups. The difficulty in achieving a desirable return rate for this survey may have been due to a lack of enthusiasm regarding nursing research. Interest in research also relates to level of education, since most nurses involvement with the research process occurs at the master's and doctoral levels. It appears that the environment in which the respondents practised did not necessarily encourage the professional development of nurses. Staff nurses did not have strong professional role models in the nurse-supervisors that they could emulate. According to Johnson (1971) more bureaucratic ideals may have been communicated to the staff nurse group if nurse-supervisors tended to be bureaucratic rather than professionally oriented. Bennis (cited by Tomlinson,1985:127) outlined the inadequacies of bureaucracies in relation to professional development. According to Bennis, bureaucracies do not adequately allow for professional growth and nor do they promote the utilization of professional resources.

Summary. Staff nurses and nurse-supervisors differed significantly according to age, experience, education, and professional score. According to other research these variables predict the professional or bureaucratic orientation of nurses. The findings indicate that nurse-supervisors should be more supportive in their perceptions of incident reporting than staff nurses. For this reason the two nurse groups' perceptions of incident reporting were compared in further analyses.

The Hospital Setting

The hospital in which the study was conducted is a regional, urban, active treatment teaching hospital. According to the hospital's Annual Report (1985), approximately 41,000 patients were admitted to the facility over the past year. The estimated operating surplus for 1984 to 1985 was $200,000 which remained relatively unchanged from the previous fiscal year. Staffing ratios had to be reduced and beds closed in order to meet budget constraints. The hospital's liability insurance premium bill in the previous year was $35,000. This year, the estimated cost is $110,000, an increase of over 300 percent (Smishek,1986:B5).

The hospital's mission statements are related to the provision of educational services and staff development programs, maintaining cost effective health care delivery, and promoting the well-being of the hospital staff. The philosophy of nursing reflects the mission statement by relating the beliefs that each nurse is responsible and accountable for the nursing care she/he provides and each is responsible for her/his own continuing education. The nursing department's philosophy also advocates that nursing practice involves the use of the nursing process through provision of total patient care and coordination with other hospital departments.

Included among the goals that the nursing department had prioritized were the following: ensuring that the nursing department meets C.C.H.A. Standards, and that nurses understand the accrediting process and use of data collection tools to provide analysis of patient workload, staffing trends, and quality assurance. Committee structures will be assessed and revised. A hospital-wide computer program has been introduced to facilitate the efficiency and effectiveness of patient care delivery systems. Among the short-term objectives is cited the necessity of reducing the number of staff injuries resulting in absenteeism and/or compensation.

Discussion. The mission statements of both the hospital and nursing department were broad in terms of expectations for quality and safety in patient care. In the same instance the hospital's mission, and the current goals and objectives of the nursing department presented an excellent opportunity to develop necessary structures and processes for a risk management program.

A sub-committee had begun initial work towards revising the incident report form and guidelines. The incident report may eventually be organized in a form that facilitates comprehensive summary, entry, and analysis in a computer program. In revising committee structures, the terms of reference of the quality assurance nursing committee could be reviewed or a nursing risk management committee could be developed. Their primary mandates would be to collect, consolidate, analyze, and investigate incident report data to ensure that safety standards in quality assurance and nursing practice are being met.

The need for cost effectiveness in the provision of health care services to the patient was included in the hospital's mission statement. The annual financial statement indicated that cost control in providing such services has continued to elude administrators. Consequently, it would seem reasonable to assume that the nursing department should receive the support and commitment of appropriate resources that would enable it to reduce risk factors affecting not only cost effectiveness, but also quality assurance.

Summary

The overall study was descriptive in design. The purpose of the study was to describe the organization and nature of incident reporting in the hospital studied and to describe nurses' perceptions of incident reporting and factors influencing their perceptions. This chapter presented a description of the study design and methodology.

A questionnaire based on the literature was developed by the researcher specifically for the survey. Questions were related to the purpose, situations, guidelines, processing, influencing factors, and overall perceptions related to incident reporting. Face and content validity were addressed through the use of experts on incident reporting and a pilot testing of the questionnaire. The return rate for the final study was 74 percent. Interviews were conducted with the director of nursing and quality assurance coordinator in order to describe the nature of incident reporting in the acute care, urban hospital.

Personal and professional variables of the respondent groups were described. Staff nurses and nurse-supervisors were significantly different on all demographic variables, and these will be used in subsequent analyses related to perceptions of incident reporting.

The mission, goals, and objectives for the hospital and the nursing department were summarized in order to provide relevant situational data surrounding incident reporting policy and practices. A purely subjective observation was that the mission statement, goals, and objectives of the hospital and nursing department lacked a definable commitment to the reduction of risks. Structures were in place that could facilitate a comprehensive risk management program. Cost-effectiveness in operations appeared to be a concern. Some aspects of the incident reporting system required revision.

CHAPTER 4

Incident Reporting in the Hospital and Nurses' Perceptions of Incident Reporting

This chapter provides a description of the findings related to the organization and nature of incident reporting in the hospital setting and nurses' perceptions of incident reporting. Specifically, this chapter describes incident reporting and the processing of incident report data as it occurs in the hospital studied, and nurses' perceptions of the purposes, situations, guidelines, processing, influencing factors, and overall perceptions regarding incident reporting. Differences in the actual and ideal purposes and processing of incident reports are also presented and discussed.

Incident Reporting in the Hospital

Sub-Problem 1

What is the organization and nature of incident reporting in the hospital?

The Director of Nursing and Quality Assurance Coordinator for the hospital studied were interviewed to provide a description of the organization and nature of incident reporting. The findings are presented and discussed in this section according to the interview schedule (Appendix C).

1. What is the purpose of the policy(ies) on which the current incident reporting system is based?

The objective of the current incident reporting process was to provide a mechanism for the nurse to inform her supervisor an incident had occurred. The nurse was able to outline what remedial action had been taken in order that the supervisor might ratify or offer further recommendations to improve the situation that had led to the incident. The expectations of the policy and process were that all incidents be reported, not only those which may be litigious. The intent of the policy was to encourage responsible and accountable nursing practice as well as a problem solving approach to patient care. The policies and procedures outlining the incident reporting process supported those aspects of the mission statement referring to the provision of a safe facility.

2. How long has the current policy and system been in place?

The current policy on incident reporting has been in place since 1963 (Appendix I). Since that time, components of the policy have undergone three critical reviews, including:

a. A re-definition of the directives for use of the form.

b. A review of the format of the form, the rationale for directions for use, the routing of the form within the organization, and the legality of the form.

c. A trial of a standardized, hospital-wide incident report form developed by the Alberta Hospital Association (A.H.A.).

3. Briefly describe the incident reporting system as it operates in the hospital.

Figure 4.1 diagrams the routing of the incident report form (Appendix J) through the principle components of the reporting system. An incident report may be initiated at the area or department level in the hospital. The form is completed and submitted to the reporter's immediate supervisor. In the nursing department reports arising on shift may be submitted either to the ADN or US of the area in which the incident occurred. Depending on the shift supervisor's choice, the report is subsequently routed to either the ADN or US depending on which one received the report first. The Coordinator receives incident reports from the ADN, who has verified, reviewed, and commented on each report before submitting it to the Coordinator.

All incidents are investigated by the ADN so that responsibility and accountability remain at the lower levels of the organization. The ADN codes the incident using general categories of "patient incident" or "patient accident" according to the report coding guidelines (Appendix K). The Coordinator reviews the reports for completeness, and if they are incomplete returns them to the ADN. Completed reports are initialed by the Coordinator and forwarded to medical records for further documentation.

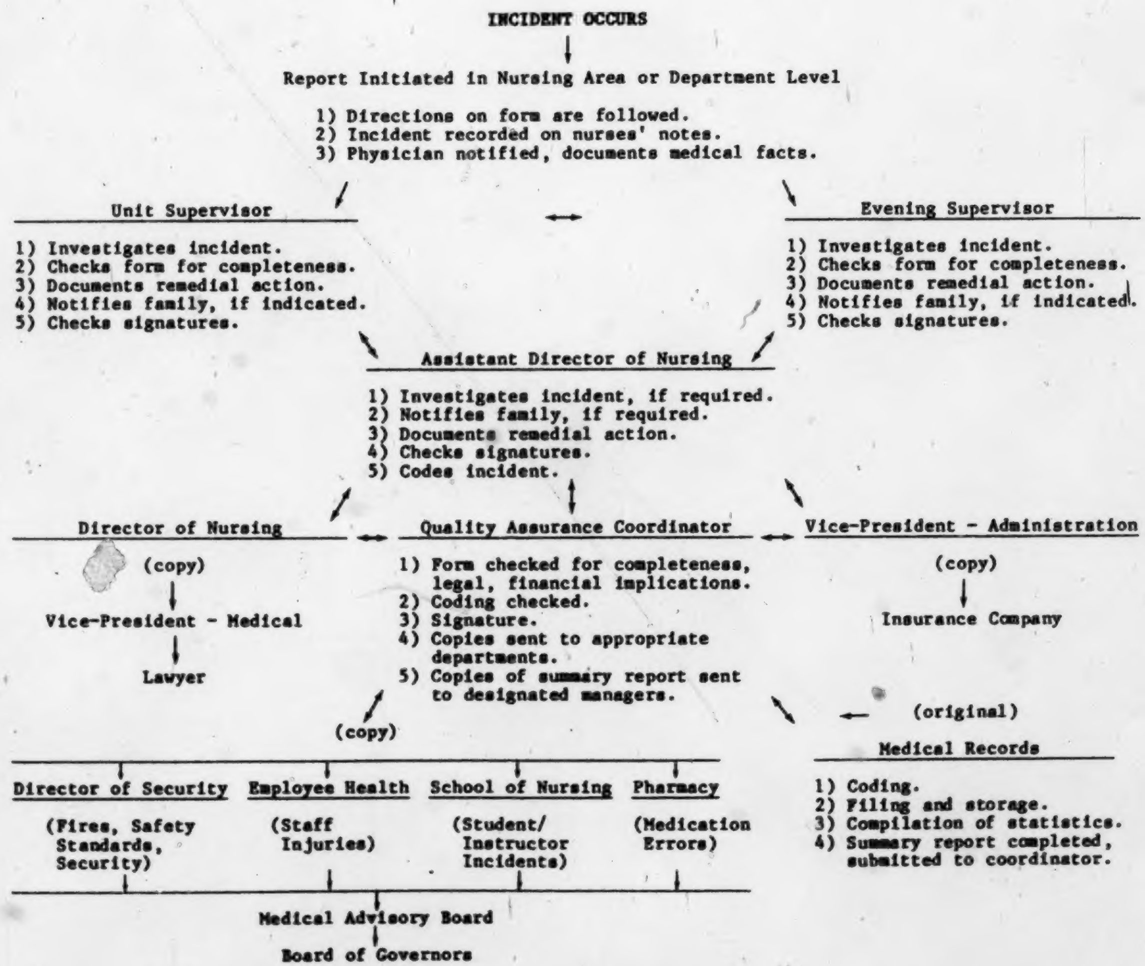

INCIDENT OCCURS
Report Initiated in Nursing Area or Department Level
1) Directions on form are followed.
2) Incident recorded on nurses' notes.
3) Physician notified, documents medical facts.
Unit Supervisor
1) Investigates incident.
2) Checks form for completeness.
3) Documents remedial action.
4) Notifies family, if indicated.
5) Checks signatures.
Evening Supervisor
1) Investigates incident.
2) Checks form for completeness.
3) Documents remedial action.
4) Notifies family, if indicated.
5) Checks signatures.
Assistant Director of Nursing
1) Investigates incident, if required.
2) Notifies family, if required.
3) Documents remedial action.
4) Checks signatures.
5) Codes incident.
Director of Nursing
(copy)
Vice-President - Medical
Lawyer
Quality Assurance Coordinator
1) Form checked for completeness, legal, financial implications.
2) Coding checked.
3) Signature.
4) Copies sent to appropriate departments.
5) Copies of summary report sent to designated managers.
Vice-President - Administration
(copy)
Insurance Company
(original)
Medical Records
1) Coding.
2) Filing and storage.
3) Compilation of statistics.
4) Summary report completed, submitted to coordinator.
(copy)
Director of Security
(Fires, Safety Standards, Security)
Employee Health
(Staff Injuries)
School of Nursing
(Student/ Instructor Incidents)
Pharmacy
(Medication Errors)
Medical Advisory Board
Board of Governors

FIGURE 4.1 Incident Report Flow Chart

The Coordinator may receive reports from other departments in the hospital, from the ADN, and from the Director of Nursing. The Coordinator or ADN route reports with potentially litigious outcomes to the Director. The form is duplicated, the copy forwarded to the Vice-President Medical who assesses the report, and if necessary, submits it to the hospital's lawyer. Reports of incidents which may result in claims by patients and/or their families are sent by the Coordinator or ADN to the Vice-President Administration. A copy of the report is submitted to the hospital's insurance company. All originals are returned to the Coordinator who submits them documentation in medical records. Upon completion of documentation, medical records returns the originals to the Coordinator for photocopying and routing of the copy to any one of four applicable areas: Director of Security, Employee Health, School of Nursing, and Pharmacy.

4. Describe your role in the incident reporting system in the hospital; and, (5), from whom you receive incident reports.

As discussed, the Coordinator's role involves ensuring the entire completion of the report, and routing the report to the appropriate individual and/or departments for information or further documentation. The Coordinator is in the process of forming an ad hoc committee to review the incident reporting system. Figure 4.1 shows from whom the Coordinator receives reports.

The Director of Nursing examines reports for their litigious and quality assurance implications. At the request of the Director, a nursing quality assurance committee examines trends in incidents and offers recommendations consisting of actions that would reduce the number of incidents occurring in the hospital. The Director also participates on hospital-wide committees which examine trends in incidents. In addition the Director communicates with other hospital executives and the Board of Governors regarding the nursing department's activities related to the reduction of incidents. The Director receives reports from the Coordinator and the ADN.

6. What happens to the report once it passes through the system?

An incident report summary for the nursing department is compiled by medical records personnel (Appendix L). The Coordinator receives the report summarizing the prior month's statistics and reviews it for trends. A photocopy is sent to designated departments within the hospital.

Incident reports are filed in medical records for three years and then destroyed. Any reports received by the Coordinator which were not appropriate to the usual departmental routing or could not appropriately be coded were stored in the Coordinator's files for the same period of time.

7. Describe the manner in which information provided by incident reports is used.

There were committees formed within each department of the hospital to review incident reports arising from their respective areas. Policy and practice are examined and recommendations for remedial measures may be suggested for the respective areas. The Medical Advisory Board received the minutes of all committees and its members may appeal, negate the recommendations, and/or present other alternatives to the committees' recommendations regarding incidents reported. A nursing practice committee assessed all aspects of the incident reporting process and would be developing a new report form to meet the individual needs of all hospital systems. Statistics were examined, analyzed, and followed up by individual committees and supervisors.

Education regarding the incident reporting process occurred in the orientation of all new hospital employees. Instruction was given regarding the policy, use of the form, and implementation of the process. At the area levels, staff arranged inservice regarding local needs for upgrading deficiencies in knowledge and skills, and for preventing of incidents. The hospital newsletter had been used to communicate initiatives to reduce and/or eliminate risks.

8. What do you perceive as barriers to incident reporting in the hospital?

The system met the current needs of the hospital in relation to quality assurance and cost effectiveness. The system did not operate as the ideal risk management program, but the components considered to be necessary for effective operation were in place. Maximum benefit from the existing structures was an ongoing goal.

The policies and guidelines surrounding incident reporting required further clarification and specificity. What comprises an incident within the hospital setting has been perceived by nursing staff and administrators as inadequately defined, and may contribute to both under-reporting and over-reporting. An ad-hoc committee will be investigating these concerns.

The absence of line communication between the Coordinator and clinical nurse educators presents an obstacle to preventative risk management. The broader educational needs of the hospital in terms of risk management are inconsistently analyzed and incorporated into inservice sessions. With so many groups of people involved in reportable incidents, continuing education of all employees is essential to effective risk management (Duran,1980). The Coordinator is not directly responsible for planning inservice and continuing education programs related to risk management.

The Coordinator perceived her job description in relation to risk management responsibilities as not being well defined. The risk manager role of the Coordinator in the organizational structure of the hospital should be clearly defined (Duran,1980).

Because of the sizable workload of US and ADN and the time needed to complete reports, the Coordinator did not receive reports within 24 hours of the incident's occurrence. Reports were allowed to accumulate in some areas and then submitted together.

Physicians and nurses did not always complete reports in the manner administration had intended. Reports were sometimes used as "teaching tools," and occasionally reports took on punitive overtones. Comments were either too brief or so detailed that the facts became difficult to discern. Reports were frequently incomplete in relation to the information requested by the form. Finally, documentation of reports was completed by medical records personnel who were unfamiliar with the context in which a nursing related incident occurred.

Not all incident reports were routed directly to the Coordinator. There was considerable overlap in the system (Figure 4.1). The Coordinator, ADN, and medical records were all involved in the screening, coding, and routing of completed reports.

The Director perceived that frequent attrition, infrequent use and/or opportunity to observe use of the report system at the area level tended to hinder the educational effects of employee orientation to incident reporting. Without reinforcement at the area level, nurses tended to forget the intent of incident reporting policies and guidelines. If the individual nurse did not perceive the need to report an incident the process could not operate effectively.

9. What do you perceive as facilitators to incident reporting in the hospital?

The Coordinator's participation in processing incident reports was perceived as an important step in formalizing the relationship between quality assurance and incident reporting. Such action also had an effect on validating administration's commitment to quality assurance.

The Director perceived departmental review of incident reports achieved a consensus regarding risk management needs. Standards were maintained throughout the hospital because of interdepartmental participation and communication.

The Director also perceived that the decentralized approach to incident investigation promoted individual accountability. The ADN and US for each area identified risks relevant to their area and they were responsible for ensuring effective remedial action.

Discussion. The current incident reporting system appeared to meet administrative and organizational expectations satisfactorily. The Director acknowledged that the system did not meet ideal expectations. Deficiencies had been identified and plans to undertake remedial action were being formed. In addition other deficiencies on the basis of the literature on risk management were observed.

While the values, goals, and structural components for incident reporting had been established, they tended not to operate in the best interest of an ideal risk management system. Revisions and changes were introduced as their necessity was perceived. Risk management appeared to be a "patching process" (reactive) rather than a preventative ongoing process.

Because risk management activities appeared to be loosely coordinated and decentralized, incident reporting structures and data may not have been used optimally hospital wide. Risk management appeared to be part of every committees' mandate. There was no core multidisciplinary committee whose mandate was the identification, analysis, investigation, remediation, and evaluation of incident reporting structures, processes, and outcomes.

Auditing the incident reporting system and process was not part of the quality assurance program, nor was it required for hospital accreditation. Therefore, the system's deficiencies could not be systematically identified and acted upon.

The Coordinator's position in the organization was such that new initiatives or changes could not be implemented without approval from the ADN group. Limitations in the Coordinator's authority may have reduced the effectiveness of the quality assurance program at times. Without direct access to clinical nurse-educators educational needs identified by the quality assurance program may not have been addressed.

The Coordinator's risk management role was generally unclear in relation to meeting the risk management needs of the organization as a whole. The literature emphasizes the necessity of the risk manager actively investigating, monitoring, and remediating situations contributing to potential risk. The role was not clearly differentiated from that of the ADN and US. A subjective conclusion was that the role tended to be secretarial in nature.

Finally, incident reports were often incomplete or incorrectly completed. The process of accurately identifying causes and determining effects of remedial action on eliminating or reducing risks was hampered because of questionable reliability and validity of report information.

Nurses' Perceptions of Incident Reporting

Sub-Problem 2

What are nurses' perceptions of the actual and ideal purposes of incident reporting?

Distribution of perceptions. In Table 4.1 the percentage distribution of nurses' perceptions of the actual and ideal purposes of incident reporting are presented. The majority of nurses agreed or strongly agreed that the actual and ideal purposes listed in this study were the purposes for incident reporting they perceived as relevant to their area or the hospital. However, there was a broader distribution of response choices for the purposes related to using reports in performance evaluations, monitoring quality assurance, assessing insurance premiums, and reporting medical-legal claims.

The actual purposes of incident reporting agreed to most strongly were identifying unusual occurrences (81%) and identifying unsafe patient environments (72%).

Approximately 66 percent of the respondents were

TABLE 4.1

Percentage Distribution of Nurses' Perceptions of Actual and Ideal Purposes of Incident Reporting

Purpose		Percentage Distribution				
		Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
Identify unsafe patient environment	Actual	1.9	10.1	16.5	60.1	11.4
	Ideal	1.9	7.7	3.2	54.5	32.7
Motivate staff to ensure safety	Actual	3.2	17.1	21.5	50.6	7.6
	Ideal	1.9	10.3	9.0	55.8	23.1
Identify staff inservice needs	Actual	5.7	22.8	40.5	24.7	6.3
	Ideal	3.2	12.3	10.3	53.5	20.6
Motivate responsible nursing practice	Actual	0.6	12.0	29.7	49.4	8.2
	Ideal	1.9	10.3	3.8	50.6	33.3
Identify unsafe nursing practice	Actual	3.2	16.6	20.4	48.4	11.5
	Ideal	3.2	15.3	10.2	45.9	25.5
Measure compliance with policy	Actual	1.3	26.1	31.8	35.7	5.1
	Ideal	1.3	16.6	18.5	46.5	17.2
Identify unusual occurrences	Actual	-	3.2	15.8	69.0	12.0
	Ideal	0.6	2.6	3.8	60.3	32.7
Performance evaluation	Actual	17.1	29.7	30.4	20.9	1.9
	Ideal	20.5	31.4	16.0	25.6	6.4
Revise policy/ procedure	Actual	3.9	16.9	41.6	32.5	5.2
	Ideal	1.9	8.4	14.3	54.5	20.8
Statistical/trend analyses	Actual	0.6	1.9	31.0	58.9	7.6
	Ideal	0.6	2.6	8.3	63.5	25.0
Monitor quality assurance	Actual	2.5	12.7	46.5	35.7	2.5
	Ideal	1.3	13.4	18.5	47.8	19.1
Assess insurance premiums	Actual	8.2	14.6	65.8	10.8	0.6
	Ideal	9.6	16.7	47.4	19.2	7.1
Medical-legal claims	Actual	5.7	7.0	56.1	27.4	3.8
	Ideal	7.1	7.7	30.1	42.9	12.2
Evidence in lawsuits	Actual	4.4	7.0	38.0	39.2	11.4
	Ideal	5.8	10.9	16.7	47.4	19.2

uncertain that actual purposes for incident reporting were related to providing a mechanism for assessing the hospital's insurance premium and 56 percent, for reporting medical-legal claims. The percentage distribution of respondents was divided between agreement and uncertainty regarding the actual purposes of incident reporting being a measure of nurses' compliance with policy/procedure and being used as evidence in a lawsuit. Nurses' perceptions of the purpose of incident reporting being a mechanism to evaluate performance were divided among strongly disagree (17%), disagree (30%), uncertain (30%), and agree (21%).

According to the percentage distribution of responses regarding the ideal purposes of incident reporting, the majority of respondents generally agreed that those listed should be purposes of incident reporting, except for use in performance evaluation. The greatest percentage of nurses agreed or strongly agreed that ideally incident reporting should identify unusual occurrences (93%), tabulate data for statistical and trend analysis (89%), identify unsafe patient environments (87%), and motivate responsible nursing practice (84%).

Regarding performance evaluation as an ideal purpose for incident reporting, nurses' responses were distributed among strongly disagree (21%), disagree (31%), uncertain (16%), agree (26%), and strongly agree (6%). The ideal purpose about which the greatest percentage of nurses felt uncertain was reports being used to assess the hospital's insurance premium (66%). In all cases, the percentage of nurses who strongly agreed with the purposes listed was greater for the ideal than for the actual.

Differences in perceptions. The results of t-test analyses are presented in Table 4.2 to indicate the statistically significant differences between the means of actual and ideal purposes.

The t-test is a parametric statistic used to test for significant differences between the means of two populations (Borg and Gall, 1983). The t-test results are reported at the 0.05, 0.01, or 0.001 levels of significance for the obtained t-value.

The difference between actual and ideal means for the purpose related to use of the report in performance evaluation was not significant. The differences between actual and ideal mean scores for all other purposes listed were significant at the 0.001 level, except for incident reporting being used as a mechanism to assess insurance premiums and as evidence in lawsuits ($p<0.01$). The greatest differences between actual and ideal means were related to the purposes to identify the inservice education needs of nursing staff, to identify policies and procedures requiring revision, to motivate responsible nursing practice, and to monitor quality assurance.

Discussion. The literature suggests that all the purposes listed are appropriate to incident reporting and necessary to the success of a risk management program. The significant differences between actual and ideal purposes

TABLE 4.2

Analysis of Nurses' Perceptions of Actual and Ideal Purposes of Incident Reporting

Purpose	Mean Score Actual	 Ideal	t-Value
Identify unsafe patient environment	3.7	4.1	6.57***
Motivate staff to ensure safety	3.4	3.9	5.58***
Identify staff inservice needs	3.0	3.8	8.08***
Motivate responsible nursing practice	3.5	4.0	6.41***
Identify unsafe nursing practice	3.5	3.8	3.50***
Measure compliance with policy	3.2	3.6	6.48***
Identify unusual occurrences	3.9	4.2	5.74***
Performance evaluation	2.6	2.7	0.58
Revise policy/procedures	3.2	3.8	7.38***
Statistical/trend analyses	3.7	4.1	5.73***
Monitor quality assurance	3.2	3.7	7.13***
Assess insurance premiums	2.8	3.0	2.74**
Medical-legal claims	3.2	3.4	4.17***
Evidence in lawsuits	3.5	3.6	2.69**

*** $p \leq 0.001$
** $p \leq 0.01$

for incident reporting indicate that although nurses associated the purposes listed as similar to those for reporting in their area, there was need for further achievement of these purposes.

Incident reports are important tools for identifying deficiencies in skills and knowledge related to a nurse's performance. The report is a tool that can assist the administrator in identifying areas where staff performance requires improvement (formative evaluation), without the information being recorded as part of the employee's final evaluation (summative). In cases of malpractice, incident reports may be used as evidence. The literature indicates, and none more strongly than Curtin (1981), that this purpose has not been appropriately implemented by nurses at all levels of the organization.

O'Grady and Finnegan (1984) noted that nursing departments have been allowed minimal participation in the business of operating hospitals. Their conclusion may be extended by adding that nurse-administrators have permitted minimal participation by other nurses in the hospital's overall operation. Nurses in this sample indicated that although they collected incident-related data, they were uncertain as to those higher level purposes for which administrators used incident reports (litigation, insurance claims, and policy revision).

Sub-Problem 3

What are nurses' perceptions regarding situations requiring completion of an incident report?

Medication situations. Table 4.3 shows the percentage distribution of nurses' perceptions of medication situations requiring incident reporting. The findings indicate that the nurses surveyed would complete an incident report for most situations involving errors in medication administration. The drug administration situations for which the greatest percentages of nurses would complete an incident report included administering the wrong medication (99%), administering a medication to the wrong patient (99%), and administering a wrong dose (94%). The situations for which the greatest percentage of nurses would not complete an incident report included administering a medication one hour late (64%), and administering a medication which caused a tissue reaction (50%). Nurses tended to be divided in regard to reporting a physician's administration of a medication which caused a tissue reaction; thirty percent would not report the incident, thirty percent were uncertain, and forty percent would report the incident. Approximately one-fourth to one-third of the nurses surveyed reported being uncertain as to whether seven of the twelve situations involving medication errors should be reported.

Injury situations. The findings shown in Table 4.4 indicate nurses' perceptions of injury situations requiring incident reporting. The situations that most nurses would report on an incident form included: a patient fall (95%), staff injury (83%), a visitor fall (63%), and a fire (58%). The situations on which nurses would not complete an incident report included: a patient developing a nosocomial

TABLE 4.3

Percentage Distribution of Nurses' Perceptions of Medication Situations Requiring Incident Reporting

Medication Errors	Percentage Distribution 1 No	 2 Uncertain	 3 Yes
Dose missed	12.0	24.7	63.3
Wrong dose	0.6	5.7	93.7
Hour late	63.9	29.1	7.0
Wrong date	0.6	9.6	89.8
Wrong rate	8.9	28.5	62.7
Wrong patient	1.3	-	98.7
Wrong route	2.5	23.4	74.1
Discontinued medication	4.4	29.1	66.5
Wrong medication	0.6	0.6	98.7
Drug reaction, nurse administered	50.0	24.7	25.3
Drug reaction, doctor administered	30.4	29.7	39.9
Incorrect narcotic count	8.2	18.4	73.4

TABLE 4.4

Percentage Distribution of Nurses' Perceptions of Injury Situations Requiring Incident Reporting

Injury	Percentage Distribution 1 No	 2 Uncertain	 3 Yes
Confused patient falls	-	5.1	94.9
Nurse injures back	9.5	7.6	82.9
Visitor falls	10.8	26.6	62.7
Nurse struck by patient	3.2	85.4	11.4
Patient complains of abuse	14.7	42.9	42.3
Burns received during resuscitation	29.7	32.9	37.3
Decubitus ulcer	72.8	22.2	5.1
Nosocomial infection	78.5	16.5	5.1
Emergency surgery	74.5	24.7	0.6
Gomco machine malfunctions	31.6	29.1	39.2
Drainage system improperly secured	36.7	38.6	24.7
Fire extinguished by staff	26.6	15.2	58.2

infection (79%), a patient requiring emergency surgery (75%), and a patient developing a decubitus ulcer (73%). Eighty-five percent of the nurses were uncertain about reporting a patient striking a nurse. Nurses were equally divided between uncertainty and reporting a patient's complaint of abuse. Nurses were almost equally divided among the three response choices regarding reporting the malfunction of a Gomco suction machine, improper securement of a patient's drainage system, and burns sustained during cardiac resuscitation.

System failures. Table 4.5 shows nurses' perceptions of situations related to system failures in the organization. Most of the nurses surveyed would not complete an incident report related to system failures. The only situation for which the majority of nurses (79%) would complete an incident report was the loss of a patient's property. The situations for which the greatest percentage of nurses would not complete a report included laboratory specimens not being collected prior to a patient's discharge (77%), a patient discharging himself (76%), and chart pages being misfiled on the wrong patient record (72%). Approximately one-fourth to one-third of the nurses surveyed were uncertain as to whether five of the nine situations listed should be reported.

Discussion. Overall, the findings substantiated the need for precise definitions of what is perceived as an incident. A comprehensive definition along with the rationale for the definition must be understood by

TABLE 4.5

Percentage Distribution of Nurses' Perceptions of System Failures Requiring Incident Reporting

System Failures	Percentage Distribution 1 No	 2 Uncertain	 3 Yes
Patient discharges self	76.4	13.4	10.2
"Charge" of unfamiliar unit	50.3	32.5	17.2
Understaffed shift	50.3	31.2	18.5
Defects in sterile packaging	53.8	25.9	20.3
Improper X-ray preparation	49.4	28.5	22.2
Stat report late	46.8	35.4	17.7
Chart pages misfiled	72.2	22.2	5.7
Lab specimens not collected	77.2	20.9	1.9
Patient property lost	4.4	16.5	79.1

implementers of the policy (Barker,1983; Driscoll, 1975; Gryzbek,1979; Salman,1979; and Stevens,1980). Although in the previous section nurses indicated that they understood the primary purpose of incident reporting was the identification of unusual occurrences, the findings in this section showed considerable variation among the nurses regarding what comprises an unusual occurrence.

One of the first rules which a nursing student learns is the absolute necessity of accuracy in medication administration. Duran (1980) notes that most medication errors are procedural errors. Correct procedure calls for the right drug, patient, dose, route, and time in medication administration. About 64 percent of the nurses indicated they would not complete an incident report if a medication were given one hour late. Hospital policy sets the time limit for dose administration at thirty minutes before or after the prescribed time. Nurses seemed to have difficulty in meeting this expectation; exact time of administration had a lower priority than other administration checks. The nurses in the sample appeared willing to report a patient's allergic reaction following a medication administered by a nurse, but not one following administration by a physician. Nurses may perceive different circumstances surrounding the two situations, expect the physician to complete his/her own report, or permit physicians a different set of guidelines for incident reporting.

Nurses have also been effectively socialized to recognize the potentially litigious implications regarding injury due to falls. Nurses in the sample appeared to place different priorities on reporting falls or injuries involving patients, visitors, and staff. Lanza (1985) and LaRocco (1985) believe that nurses do not complete reports on patient and nurse abuse because of the perceived effort required and futility of the effort, fear of investigation and blame, and belief that this standard of care is acceptable. Nurses accept their own abuse as a routine job hazard.

Nurses were divided in their willingness to report burns a patient received during resuscitation although hospital policy requires that all burns be reported. In lieu of the fact the patient's life is saved, such an injury may seem trivial. If the patient is not harmed, nurses may not perceive the situation as an incident. If a patient routinely receives burns during resuscitation the experienced nurse may not perceive this as unusual. Nurses may not perceive the purpose of incident reporting as being preventative of future incidents but only as documentation of an incident as it occurs.

Nurses tended not to perceive decubiti, nosocomial infections, emergency surgery, equipment malfunction, or improper use of equipment as unusual occurrences. Such incidents are related to the quality of nursing and medical care. If nurses do not perceive a relationship between the incident, incident reporting, and quality assurance they may not be motivated to use the form. Nurses in the sample appeared to use different decision criteria for reporting the incidents. Policy appeared not to be a significant factor. Completing an incident report for such occurrences could result in closer examination of current practice, an event both doctors and nurses may view as an intrusion or as a personal threat.

Nurses did not perceive system failures as unusual incidents. The situations listed may have been accepted as part of the routine occurrences in the operation of a hospital. To complete reports each time a failure occurs could overburden an already paper-ridden system. Other methods of reporting might be used. Staff also learn to adapt and work around the shortcomings of the system.

Sub-Problem 4

What are nurses' perceptions of the frequency with which guidelines for incident reporting are followed?

Perceptions of guidelines. Table 4.6 shows the percentage distribution of nurses' perceptions regarding the frequency with which guidelines for incident reporting are followed in their area. The guidelines for incident reporting that the majority of nurses perceived were always followed were ensuring appropriate signatures appeared on the report (74%), documenting a concise and accurate description of the incident on the report (69%), recording an incident on the nurses' notes (54%), and recording a pertinent assessment (53%). The guideline that a majority of nurses (53%) selected as frequently being met was

TABLE 4.6

Percentage Distribution of Nurses' Perceptions of Guidelines for Incident Reporting

	Percentage Distribution				
	1	2	3	4	5
Guidelines	Never	Rarely	Frequently	Always	Uncertain
Accurate description of incident	-	0.6	29.7	69.4	0.6
Patient assessment recorded	1.3	4.4	38.0	53.2	3.2
Appropriate signatures/ notations	-	1.9	21.5	74.1	2.5
Nonjudgmental comments	-	1.9	41.8	40.5	15.8
Remedial plan outlined	3.2	25.9	36.7	25.9	8.2
Plan reviewed with Supervisor	7.6	24.7	34.2	25.9	7.6
Completed in 24 hours	1.9	16.5	52.5	19.0	10.1
Incident recorded on nurses' notes	-	7.0	34.2	53.8	5.1
Report recorded on nurses' notes	13.3	20.3	29.1	29.7	7.6
Confidentiality maintained	3.8	18.4	25.9	28.5	23.4

completing the report in 24 hours.

Nurses perceived equally that remarks made by reporters on the incident form were frequently (42%) or always (41%) nonjudgmental. The findings show that nurses' perceptions were equally divided among rarely, frequently, and always for the guidelines referring to preparation of a remedial plan, review of the plan with a supervisor, and documentation of the incident report on the nurses' notes. Nurses' perceptions were evenly distributed among rarely (18%), frequently (26%), always (29%), and uncertain (23%) regarding the maintaining of confidentiality in incident reporting.

Discussion. The guidelines for incident reporting are entrenched in legal stipulations for record keeping. The findings suggest that nurses are generally conscientious regarding the documentation and witnessing of incidents on the appropriate records. Documentation may not always be unbiased as suggested by the findings. This result may explain nurses' uncertainty and/or agreement that the purpose of incident reports is r~~elated to~~ performance evaluation. Since legal standards dictate the need for objective recording on hospital documents, nurse-administrators may need to investigate this aspect of incident reporting.

Many reports are not completed within 24 hours as is legally required. This may be due to the extra time needed to ensure that other guidelines would always be met. Maintaining confidentiality also seemed to be a guideline that was adhered to inconsistently. The purpose for routing reports to the appropriate administrator as quickly as possible is to protect the privacy of the individual involved and to permit a timely and effective response to the incident.

Based on these findings, nurses appeared to adhere inconsistently to the legal recommendation that completion of a report form not be recorded in the nurses' notes. Hospital policy also stipulated that nurses should not take such action. Only thirteen percent of the nurses surveyed indicated that they never documented completion of the report in the nurses' notes. Further clarification of this guideline would seem necessary. Perhaps general orientations to incident reporting for new employees should be reviewed for content and accuracy.

Finally, few nurses perceived that plans for remedial action were outlined on the report or discussed with the supervisor. The Director of Nursing perceived this as a regularly occurring activity. One might assume that policy, for legal reasons, does not permit documentation of the plan on the incident report. However, this would seem to suggest that if a plan is not outlined, the probability of any effective action to prevent similar future incidents from taking place may be diminished.

Sub-Problem 5

What are nurses' perceptions regarding actual and ideal processing of incident reports?

Distribution of perceptions. Table 4.7 shows the percentage distribution of nurses' perceptions of the actual and ideal processing of incident reports in their area.

Processing of incident report data which the greatest percentage of nurses (80%) perceived as actually never occurring was keeping personal anecdotes of incident reports completed. Processing of data that nurses perceived rarely to frequently occurring included: keeping of statistical and anecdotal records by the supervisor, coordinating interdepartmental objectives for safety, and identifying inservice needs for staff. A specific storage period for incident reports was perceived as occurring frequently or always. Approximately 59 percent of the nurses surveyed perceived report data being frequently used to evaluate patient, staff, and visitor safety. Sixty-five percent of the nurses surveyed perceived that in actual practice the report system was always evaluated during accreditation, and 68 percent that report data were always used to assess the hospital's insurance premium. A majority of nurses were uncertain regarding the actual frequency of occurrence for seven of the twelve processing activities listed.

The majority of nurses perceived that the data processing activities listed should ideally always occur in their area. The processing activity the greatest percentage of nurses (81%) favored was the use of data to revise policy and procedures for incident reporting. The smallest percentage of nurses (53%) selecting always as an ideal activity for using data was maintaining personal anecdotal

TABLE 4.7

Percentage Distribution of Nurses' Perceptions of Actual and Ideal Processing of Incident Reports

			Percentage Distribution			
Processing Activities		1 Never	2 Rarely	3 Frequently	4 Always	5 Uncertain
Regular reports received on unit	Actual	32.3	22.2	14.6	9.5	21.5
	Ideal*	3.8	5.1	19.0	61.4	9.5
Reports reviewed at unit meetings	Actual	27.8	36.1	20.3	3.2	12.7
	Ideal*	3.2	2.5	28.5	55.7	9.5
Statistical/ anecdotal records kept by supervisor	Actual*	19.6	12.0	12.0	8.2	47.5
	Ideal*	4.4	1.9	14.6	62.7	15.8
Personal records kept	Actual	77.8	13.3	3.2	3.2	2.5
	Ideal*	24.1	2.5	13.3	44.9	14.6
Report data used to evaluate patient safety	Actual	5.1	3.8	30.4	12.0	48.7
	Ideal*	3.2	2.5	17.7	62.0	13.9
Report data used to revise policy/ procedure	Actual*	3.2	7.0	12.0	7.6	69.6
	Ideal*	1.9	1.9	10.1	60.1	25.3
Report data used to coordinate interdepartmental safety objectives	Actual	5.7	12.7	15.2	7.6	58.9
	Ideal*	1.9	3.2	15.8	57.6	20.3
Report data used to identify inservice needs	Actual*	7.0	17.1	15.8	5.1	54.4
	Ideal*	3.2	3.2	15.2	61.4	16.5
Reporting system assessed in accreditation process	Actual*	0.6	2.5	10.1	24.7	61.4
	Ideal*	0.6	3.2	13.3	51.3	31.0
Report data audited for quality assurance	Actual*	10.1	4.4	8.2	14.6	62.0
	Ideal*	6.3	4.4	13.3	43.7	31.6
Report data used to assess insurance premiums	Actual	5.1	0.6	4.4	21.5	67.7
	Ideal*	6.3	0.6	7.0	58.9	26.6
Set storage period in medical records	Actual	1.3	1.9	5.1	4.4	87.3
	Ideal*	9.5	6.3	7.6	29.1	46.8

* <100% due to no response from some participants

accounts of incident reports completed.

Differences in perceptions. Table 4.8 shows the t-test analyses for significant differences between the actual and ideal means for the processing of incident report data. In calculating the mean response to each item, response frequencies for "uncertain" were deleted because they did not fit into the continuous range of response choices. Interpretations of the analyses were the same as for actual and ideal purposes for incident reporting.

There were no significant differences between the actual and ideal means for set storage period in medical records and for use in assessment of insurance premiums. All of the other differences between actual and ideal means for activities related to the processing of incident report data were significant at the 0.001 level, except for accreditation evaluation of the reporting system (0.05). The greatest discrepancies between actual and ideal means, in order, were for the activities of reviewing reports at unit meetings and keeping personal records of incident reports completed.

Discussion. If effective incident reduction is to occur the experts argue data collected from incident reports must be analyzed, investigated, organized into remedial plans, and monitored as an ongoing process. Based on the overall findings, one is drawn to conclude that the nurses surveyed in this study perceived problem-solving based on report data as less than optimal. Although committee structures in the actual hospital setting were established for regular

TABLE 4.8

Analysis of Nurses' Perceptions of Actual and Ideal Processing of Incident Reports

	Mean Score		
Processing Activities	Actual	Ideal	t-Value
Regular reports received on unit	2.1	3.5	12.81***
Reports reviewed at unit meetings	2.0	3.5	17.68***
Statistical/anecdotal records kept by supervisor	2.2	3.5	9.86***
Personal records kept	1.3	2.9	14.28***
Report data used to evaluate patient safety	3.0	3.6	7.08***
Report data used to revise policy/ procedure	2.8	3.6	6.30***
Report data used to coordinate interdepartment safety objectives	2.6	3.6	8.36***
Report data used to identify staff inservice needs	2.4	3.6	9.57***
Reporting system assessed in accreditation process	3.6	3.8	2.46*
Report data audited for quality assurance	2.8	3.3	3.68***
Report data used to assess insurance premiums	3.4	3.5	1.43
Set storage period in medical records	3.0	2.9	0.19

*** $p \leq 0.001$
* $p \leq 0.01$

coordination of incident report data, nurses perceived the frequency of coordination as being less than regular. The literature indicates that a core multidisciplinary committee to deal exclusively with report information is necessary for effective risk management.

The occurrence of processing report information at the individual and area level was perceived at various frequency levels. Since the majority of nurses surveyed were staff nurses, the findings seem to indicate that this group did not participate optimally in the use of data they were responsible for collecting. The hospital as a bureaucratic organization may not hold staff nurses accountable and responsible for their performance and, therefore, may not expect them to participate in problem-solving related to improving performance in patient care. Nurses' perceptions that they never keep accounts of their role in incidents also tends to confirm this observation.

Nurses were also uncertain as to how administrators used incident report data. Although new employees were oriented to current incident reporting structures, processes, and outcomes, most nurses perceived continuing education in these areas as not occurring as often as ideally required. The ideal purposes of incident reporting should be directly related or linked to the processing activities of incident report data. Nurses' perceptions of the actual data processing indicated less than optimal achievement of the purposes listed earlier, particularly at the area level. It also appears that what the Director perceived as occurring in the management of incident report data may not be at the level of ~~expect~~ations held.

Sub-Problem 6

What are nurses' perceptions of factors influencing incident reporting?

Distribution of perceptions. Table 4.9 shows the findings for nurses' perceptions of factors influencing incident reporting in their area. The greatest percentage of nurses agreed or strongly agreed that their decision to initiate an incident report depended on the opinion of their supervisor (85%), colleagues (61%), and physician (60%). Almost 95 percent of the nurses surveyed agreed that policy was influential in their initiation of a report, and forty percent strongly agreed that this factor was influential.

Responsibility to the profession (94%), supervisor (84%), hospital (78%), patient's family (78%), and physician (63%) were agreed or strongly agreed upon by the nurses surveyed as factors important to their decision to initiate an incident report. Sixty-seven percent of the nurses strongly agreed and another thirty percent agreed that responsibility to the patient was influential in their decision to complete a report.

Nurses agreed or strongly agreed (75%) that not understanding the purpose of incident reporting and what comprised an incident (80%) were important factors in their not initiating an incident report. Nurses tended to disagree or strongly disagree that factors related to documentation

TABLE 4.9

Percentage Distribution of Nurses' Perceptions of Factors Influencing Incident Reporting

	Percentage Distribution			
Factors	1 Strongly Disagree	2 Disagree	3 Agree	4 Strongly Agree
Influenced by opinion of:				
1) Colleagues	7.9	31.1	55.6	5.3
2) Supervisor	2.6	12.5	56.6	28.3
3) Physician	10.5	30.9	47.7	11.8
4) Policy	0.6	3.9	55.5	40.0
Responsibility to:				
1) Hospital	3.9	18.3	64.1	13.7
2) Physician	5.9	31.6	55.3	7.2
3) Profession	0.7	5.3	67.1	27.0
4) Supervisor	2.0	13.9	70.9	13.2
5) Patient	0.6	2.6	29.5	67.3
6) Patient's family	4.6	17.6	49.7	28.1
Less inclined if:				
1) Unaware of purpose	1.3	24.0	58.4	16.2
2) Unaware is "incident"	1.3	19.4	63.9	15.5
3) Uncertain how to complete	18.8	55.8	20.8	4.5
4) Uninformed re: liability	7.1	47.7	37.4	7.7
5) Labelled incompetent	18.8	65.6	13.6	1.9
6) Fearful of evaluation	15.5	63.9	18.7	1.9
7) Jeopardizes reputation	13.6	68.8	16.2	1.3
8) Other methods available	9.1	47.4	39.0	4.5
9) Not observed by:				
a) Physician	20.6	71.6	7.1	0.6
b) Supervisor	18.7	69.7	9.7	1.9
c) Patient	20.6	69.0	8.4	1.9
d) Patient's family	20.8	68.2	9.1	1.9
e) Colleagues	20.0	70.3	9.0	0.6
Workload	19.6	49.0	26.8	4.6

(continued ...)

TABLE 4.9

Percentage Distribution of Nurses' Perceptions of Factors Influencing Incident Reporting

(continued)

Factors	Percentage Distribution 1 Strongly Disagree	 2 Disagree	 3 Agree	 4 Strongly Agree
More inclined if:				
1) Policy is practical	1.3	5.7	65.6	27.4
2) Threat of litigation	1.9	13.5	51.0	33.5
3) Express opinion	2.6	36.8	48.4	12.3
4) Not required to sign	18.7	67.1	11.6	2.6
5) Understand purpose	1.3	14.2	65.2	19.4
6) Minimal time:				
a) Reporter to complete	3.2	36.8	46.5	13.5
b) Others to complete	3.2	34.8	48.4	13.5
7) Initiator of report ensures entire completion	7.6	47.1	33.8	11.5
Seriousness of incident	5.4	17.4	30.9	46.3
Report completed:				
1) Policy/procedural not followed	5.2	41.9	43.9	9.0
2) Unusual occurrence	3.9	33.8	51.3	11.0
3) Regardless of opinion	5.1	24.2	57.3	12.7
Report completed by:				
1) Nurse responsible	3.2	5.2	45.5	46.1
2) Nurse witnessing	0.7	4.6	57.9	36.8
3) Nurse discovering incident	-	1.9	59.7	38.3

(78%), workload (69%), other methods of reporting (57%), and legalities (55%) contributed to being less inclined to complete a report. Being observed by others in the course of causing an unusual incident did not lessen the majority of the nurses' inclination to report. As well, nurses disagreed or strongly disagreed that being perceived as incompetent (84%), jeopardizing another's reputation (82%), and being evaluated on the basis of incident reports (79%) were not factors that lessened their inclination to file an incident report.

The nurses surveyed agreed or strongly agreed that practical policies (93%) and threat of litigation (85%) were influential factors in their increased inclination to complete an incident report. Nurses were divided in their agreement and/or disagreement with the following factors as increasing their motivation to initiate an incident report: expression of personal opinion, minimal time required by self and others in completing reports, and completion of the entire report by its initiator. Approximately 86 percent disagreed or strongly disagreed that having to place their signature on the report deterred them from reporting.

Regarding the seriousness of the incident as being a deciding factor in initiating an incident report, 31 percent of the nurses agreed and 46 percent strongly agreed this factor was important in their decision.

The majority of nurses agreed or strongly agreed that an incident report should be completed by the person discovering the incident (98%), the person witnessing the incident (95%), and/or the person responsible for the incident (92%). Nurses agreed or strongly agreed that a report should be completed regardless of personal opinion (70%) and when an unfamiliar situation occurred (62%). Nurses were divided in their perceptions that a report be completed whenever policy and procedure were not followed: 44 percent agreed and 42 percent disagreed.

Discussion. Hospital policy and the supervisor are important resources for the nurse regarding the decision to complete a report. Since nurse-supervisors are consulted on policy matters, it would seem necessary that they be well informed of content and intent of the policy. In a bureaucratic organization this is expected. The results also suggest that in spite of policy being an important resource for the majority of nurses, a number of other factors impact on their judgment. These factors may or may not support policy content. The fact that physicians are important resources for nurses in guiding their practice would emphasize the importance of the former being informed and supportive of policy content and its implementation. According to the Coordinator in the hospital studied, doctors, as well as nurses, do not always comply with reporting guidelines.

Responsibility to the patient and profession appeared to be a decisive factors in incident reporting. It would seem very important that the supervisors', hospitals', and physicians' perceptions be congruent with those of nurses if conflict is to be avoided as to whether a report should be initiated. However, the findings regarding factors influencing incident reporting appear to contradict nurses' professional ethical standards. Although all situations listed had implications for the overall quality of care provided by the hospital and its personnel, nurses appeared not to inter-relate responsibility to the patient and responsibility for reporting all situations affecting or potentially affecting the quality of care given the patient. Although policy is important to decisions regarding incident reporting, responsibility to the hospital is not necessarily expressed through policy implementation if it conflicts with perceived responsibility to the patient.

Moore (1983) suggested that the purpose of any policy must be clearly understood before it can be implemented effectively. This was supported by the findings in this survey. Nurses also indicated that uncertainty regarding the definition of an incident may have deterred them from reporting. This finding explained, in part, the diverse responses regarding situations requiring incident reporting. Nurses contradicted themselves regarding liability as a factor in incident reporting. It would seem that actual rather than potential threat of litigation is a factor influencing reporting practices. Although the literature emphasizes fear of judgmental evaluation resulting from reporting incidents, the nurses in the survey indicated this was not a deterrant to their incident reporting behaviors. Despite the findings indicating that some nurses perceived performance evaluation as a purpose for incident reporting, the majority of nurses persevered in their decision to report. Having to sign a report was also not viewed as a threat, but nurses expressed a desire for the opportunity to document their own opinion or impression of the incident on the report. This response may have been related to fear of performance evaluation if the reporting nurse confessed to causing an incident.

The literature also suggests that nurses have attempted to conceal incidents. Nurses in the survey indicated they would be accountable for an incident despite not being observed by others. This finding should be interpreted in conjunction with other factors nurses perceived as influential in their reporting behaviors, for example, if the incident was not serious then nurses would not report the incident.

Of the nurses surveyed, the greatest percentage would not choose other methods of communicating the occurrence of an incident. Approximately 39 percent indicated they might use other alternatives if they were available. Findings regarding situations requiring reporting indicated that nurses were uncertain or would not report some incidents, but based on these findings nurses may have reported some situations using alternative methods of communication.

Although nurses indicated that workload was not influential in their decision to complete a report, they were divided in their agreement that time to complete a report was a factor. If the seriousness of the incident or threat of litigation existed, then neither workload nor time to complete a report would deter the nurse from reporting the incident. The fact that nurses were divided in their agreement that reports should be completed whenever policy and procedure were not followed may have been influenced by workload and time available. Perhaps the reason nurses seek other opinions regarding the initiating of an incident report is because they require assistance in eliminating extraneous influencing factors in order to determine the necessity of reporting. It would seem that nurses prefer sharing their decision with others rather than acting independently. Although the person witnessing and/or discovering the incident should complete the report form, it would seem that a large percentage of nurses (46%) preferred that the perpetrator of the incident complete the report. Nurses in the survey appeared to support individual accountability in this instance. Perhaps fear of evaluation, punishment, or litigation may have prompted these nurses to expect that the individual causing the incident should be held accountable.

Nurses agreed that the purpose of incident reporting, to notify administration of unusual occurrences, was a factor in completing an incident report. Based on the findings in this survey, nurses indicated that they were uncertain as to what incidents administrators expected and accepted as appropriate to report. Wasuita (1982) indicated that what comprises an unusual occurrence is subject to individual interpretation. The majority of nurses agreed that personal opinion should not enter into the final decision. Only a small percentage of respondents strongly agreed that personal opinion should be a factor in incident reporting. Nurses appeared to use as yet undefined and selective criteria to evaluate an incident's eligibility for reporting. Nurses also seemed to perceive this process as being objective rather than subjective, the latter possibly allowing personal fear of negative outcomes to determine their plan of action. Whether this occurs in actual practice cannot be determined conclusively from this survey.

Sub-Problem 7

What are nurses' overall perceptions of incident reporting?

Distribution of perceptions. Table 4.10 shows the percentage distribution for nurses' overall perceptions of incident reporting. Respondents were asked to rate their overall perceptions of incident reporting on a five-point scale.

The item receiving the highest rating (5) by the greatest percentage of the nurses surveyed was the importance of incident reporting in providing safe patient care (18%). A rating of 4 was given by 52 percent of the nurses regarding the frequency of compliance with policies for incident reporting. Approximately 53 percent of the nurses rated their satisfaction with current policies on incident reporting at 3.

TABLE 4.10

Percentage Distribution of Overall Perceptions of Incident Reporting

Perception	Mean Score	Percentage Distribution Exceptionally Poor/Low 1	2	3	4	Exceptionally Good/High 5
Understanding of purpose	3.5	0.6	8.3	41.0	44.2	5.8
Frequency of compliance	3.6	1.3	7.7	29.0	52.3	9.7
Knowledge of situations requiring reporting	3.5	0.6	9.0	38.5	44.9	7.1
Satisfaction with guidelines	3.0	3.2	20.5	49.4	24.4	2.6
Effectiveness in quality assurance	2.8	7.7	30.8	42.3	17.3	1.9
Effectiveness in improving patient safety	3.6	0.6	12.2	28.8	40.4	17.9
Effectiveness in improving nursing practice	2.6	9.6	32.5	45.2	9.6	3.2
Satisfaction with policies	2.9	2.5	24.2	52.9	19.1	1.3

The items the majority of nurses rated either 3 and 4 were frequently of compliance, importance of incident reporting to patient safety, understanding of the purpose of reporting, and knowledge of situations comprising incidents. The items which the majority of nurses rated either 2 and 3 were effectiveness in promoting quality assurance and in improving nursing practice. The majority of ratings for satisfaction with guidelines and policies for incident reporting ranged between 2 and 4.

Discussion. The nurses in this survey did not appear to perceive the system as optimal in operation nor did they appear to condemn the system's operation. It would seem that before the importance of incident reporting to patient safety can be perceived as exceptionally high by a greater percentage of nurses, ratings for the other elements in the incident reporting system must improve.

Nurses dissatisfaction with current policy and guidelines may relate to the purpose, situations, processing, and factors in incident reporting. Major weaknesses in the system appeared to exist in processing incident report data for promoting quality assurance and improving nursing practice. If policies, guidelines, and the climate in which reporting was to take place lacked clarity and were unsupportive, then the data gathered from reporting may not be valid or reliable enough to facilitate realistic and effective evaluation and remediation of inadequacies in the incident reporting system.

Comment Summary

General comments. Many respondents used the opportunity to explain why they had responded to items in specific ways or to comment additionally on incident reporting. The comments were edited for brevity, and they are summarized according to similar categories of thought.

1. Nurses indicated that they were intimidated by the incident reporting process.

> "Many of my colleagues are reluctant to report even the more obvious unusual occurrences."
>
> "Incident reports probably motivate nurses toward irresponsible practice."
>
> "I know what I should do but often it is different from what I actually do."
>
> "The effectiveness of incident reporting depends on the honesty of the individual nurse . . ."

2. Nurses indicated they believed incident reports were used negatively in performance evaluation.

> "We can not use incident reports to evaluate nurses."
>
> "Most nurses fear incident reports will be used against them in evaluation. No distinction is made as to who caused the incident."

3. Nurses believed that incident report data were not being used effectively in meeting quality assurance and safety objectives established by the hospital.

> "I do not know how much the quality of patient care is improved through incident reporting."
>
> "A better understanding of what happens to incident reports after they leave our area would make my efforts seem less futile."
>
> "Incident report information is not used optimally in this hospital."

> "We waste a lot of time because of recurring incidents."

> "Incident reports could be used to assist unsafe nurses to acquire the skill and knowledge in which they are deficient."

4. Nurses expressed dissatisfaction with incident reporting policies, procedures, and guidelines.

> "I question the confidentiality of reports when they are visible to all who work at the desk or are attached to patient charts for completion."

> "Of what significance is the giving of Senekot instead of Surfak, or 7 ml. of Colace instead of 5 ml.? These are not serious errors."

> "In reviewing policies on incident reporting I discovered I was unaware of the number of incidents requiring a report."

> "My decision to complete a report depends entirely on the seriousness of the incident."

> "The policies on incident reporting are missing from our unit manual."

> "We need better guidelines and assistance on how to report."

> "Currently incident reports can be overused."

> "A form pinpointing the exact cause of an incident is needed."

> "I would like to see a checklist format replace the current form."

> "Incident reporting in this hospital is a haphazard process with the majority of nurses perceiving it as punitive or applicable to everyone else but themselves."

> "Despite the hassles and time involved in completing the reports they can be valuable in improving patient care."

Discussion. Nurses comments provided additional insights and emphases to the findings on nurses' overall perceptions of incident reporting. The fact that the current incident reporting system does not operate in the best interest of an ideal risk management program has been demonstrated additionally by nurses' comments, particularly those items related to process, guidelines, practice, and policy. Some of the nurses' comments indicated that before situations are reported they must have significant personal meaning to the reporter.

Contrary to what the survey indicated, nurses confided that they or their colleagues were intimidated by incident reporting. A purely subjective conclusion was that nurses in the survey and the Coordinator tended to convey less optimism and enthusiasm for the current reporting system than did the Director. Research findings cited in Chapter 2 indicated that this is to be expected, that different levels of an organization tend to hold different attitudes and points of view about the social reality of the practice setting.

Summary

This chapter has analyzed and discussed the findings related to interviews with the Director of Nursing and Quality Assurance Coordinator on the organization and nature of incident reporting in the hospital studied, and the findings related to the survey of nurses' perceptions of incident reporting. The percentage distributions for nurses' perceptions of the purposes, situations, guidelines, processing, factors, and overall perceptions related to incident reporting were presented. In addition the differences between actual and ideal purposes and processing of incident reports were discussed. The results of the t-test analysis indicated where statistically significant differences existed between the actual and ideal situations. A final section presented a brief summary and discussion of the comments made by study participants.

The incident reporting process in the hospital studied is a centralized process with current administrative efforts directed towards decentralizing the processing of incident reports. Concerns within the system are addressed by various committee structures, but there is no core multidisciplinary committee that deals exclusively with risk management. Although all new employees receive an orientation to the structures, process, and outcomes of the incident reporting system, there appears to be few continuing education programs related to risk prevention. Quality assurance and incident reporting systems are integrated through the Coordinator's role but optimal advantage does not appear to have been taken in using incident report data to meet quality assurance objectives.

The majority of nurses surveyed agreed that the purpose of incident reporting was to identify an unusual occurrence. Nurses indicated that they were generally uncertain as to the purposes for which administration used reports. Nurses' perceptions between the actual and ideal differed most for incident reports being used to identify staff education needs. The least discrepancy between actual and ideal purposes was in reports being used for performance evaluation. Significant differences existed between all the actual and ideal purposes listed except reports being used for performance evaluation.

Situations the majority of nurses identified as requiring reporting were medication errors, patient falls, and staff and visitor injuries. Nurses tended not to report situations involving nurse and/or patient abuse and system failures. Nurses varied in their approaches to deciding what they would report. Quality assurance and cost effectiveness did not appear to be part of nurses' perceptions of situations requiring reporting, nor did hospital policy. Situations which implied greater legal consequences appeared to attract increased reporting.

The frequency with which guidelines for reporting were met by the nurses surveyed tended to vary. The guidelines the greatest percentage of nurses always followed were accurate and concise documentation of assessments of the incident on hospital records, and completion of appropriate signatures on the incident form. Nurses were divided regarding the frequency that nonjudgmental remarks appeared on the report.

Nurses' perceptions were varied regarding the optimal level at which processing of report data actually occurred. The findings appeared to indicate that the amount of probelm-solving data processing that occurred at the area level varied among the units and tended to be less than optimal. Differences between actual and ideal processing were significant, except on assessment of hospital premiums and storage time for incident reports in medical records.

Factors influencing incident reporting were related to policy content, responsibility to the patient, profession, and supervisor, seriousness of the incident, and legal implications. The majority of nurses disagreed that fear of evaluation or inadequacies in the system discouraged incident reporting. Nurses also disagreed that workload was a factor related to underreporting, but they also expressed the need for minimal time to complete a report.

Nurses' overall perceptions of incident reporting indicated that policies and guidelines should be re-evaluated particularly with regard to promoting quality assurance and improving nursing practice. The majority of nurses tended to rate the operation of the incident reporting system as average. Although a small percentage perceived the system as meeting patients' safety needs at an exceptionally high level, other components of the system would require higher ratings before a greater percentage of nurses could be expected to give this same rating. From a purely subjective point of view, nurses' overall perceptions and comments tended to indicate less enthusiasm for the operation of the system than did the comments of the Director of Nursing and the Quality Assurance Coordinator.

CHAPTER 5

The Relationship of Personal and Professional Variables To Nurses' Perceptions of Incident Reporting

This chapter presents the findings regarding the relationship of selected personal and professional characteristics to nurses' perceptions of purposes, situations, guidelines, processing, influencing factors, and overall perceptions related to incident reporting. The nurses' perceptions were examined according to the following independent variables: age, position, area of nursing, years in position, years in area, years in profession, other positions held, highest level of education, and professional score.

To test for significant differences between and among the means of groups, two methods of parametric statistical analyses were used: (1) the t-test, and (2) one-way analysis of variance followed by the Scheffé procedure. The t-test was used for demographic variables divided into two groups, whereas the analysis of variance procedure was used to test for significant differences among the means of variables separated into three or more groups. The t-test results are reported at $p \leq 0.05$ level of significance for the obtained t-value. The t-tests were performed as described in Chapter 3.

The test statistic in analysis of variance is called the F statistic. Analysis of variance is used to determine whether mean scores on one or more factors differ significantly from each other, and whether the factors interact significantly with each other (Borg and Gall,1983:379). The null hypothesis states that all group means are equal. The alternative is that at least one pair of means is different from the others. The alternative hypothesis does not specify which pairs are not equal. Statistical significance for any pair of means was determined by the Scheffe procedure. Statistical significance for the F ratio for the one-way analysis of variance was set at 0.05, and statistical significance for any pair of means following the Scheffé procedure was reported at 0.10 level.

According to Winer (1971:38) the assumptions governing the use of analysis of variance, namely, random samples, homogeneity of variance, and normality of distribution within populations from which subgroups are sampled, can be violated without significantly distorting interpretations of the F statistic. Winer also stated that the t-test is similar with regard to these assumptions.

Actual and Ideal Purposes of Incident Reporting

This section presents significant differences between and among group means according to the results of t-test analysis, and analysis of variance with Scheffé procedure regarding nurses' perceptions of the actual and ideal purposes of incident reporting according to personal and professional independent variables. In separate tables, the significant findings are reported to facilitate clarity in discussion. There were no significant differences among groups according to years in position.

Sub-Problem 8

What are the significant personal and professional variables influencing nurses' perceptions of the actual and ideal purposes of incident reporting?

Nurses' perceptions. Table 5.1 shows nurses' perceptions in four groups according to age. The mean responses of nurses over forty years was greater than the mean responses of nurses under twenty-six years of age regarding the actual purposes: identifying unsafe patient care environments, and reporting medical-legal claims to the hospital attorney. The mean response of nurses thirty-one to forty years was greater than the mean response for nurses under twenty-six years of age regarding the actual purpose measuring nurses' compliance with policy and procedures.

Table 5.2 shows nurses divided into two groups according to their position. The t-test analysis identifies significant differences between the means of two groups. Staff nurses and nurse-supervisors differed significantly according to their perceptions regarding the actual purposes of reporting as identifying inservice needs, and the actual and ideal purpose of reporting medical-legal claims to the hospital attorney. Nurse-supervisors agreed significantly more with the two purposes than did staff nurses.

TABLE 5.1

Differences Among Nurses' Perceptions of Actual and Ideal Purposes of Incident Reporting by Age

		Mean Score						
Purpose		Group 1 <26	Group 2 26 to 30	Group 3 31 to 40	Group 4 >40	F-Ratio	Probability	Pairs Significantly Different
Identify unsafe patient environment	Actual	3.43	3.66	3.89	3.94	3.09	0.03	4>1
Measure compliance with policy	Actual	2.94	3.00	3.50	3.39	3.80	0.01	3>1
Medical-legal claims	Actual	3.04	3.16	3.06	3.53	2.60	0.05	4>1

TABLE 5.2

Differences Between Nurses' Perceptions of Actual and Ideal Purposes of Incident Reporting by Position

		Mean Score			
Purpose		Group 1 Staff Nurse	Group 2 Nurse-Supervisor	t-Value	Probability
Identify staff inservice needs	Actual	2.96	3.45	2.21	0.03
Medical-legal claims	Actual	3.10	3.55	2.32	0.02
	Ideal	3.37	3.95	2.48	0.01

Table 5.3 shows the findings from analysis of variance and the Scheffe procedure for nurses' perceptions of the purposes of incident reporting according to area of nursing practice. Nurses were separated into three groups by area. Nurses in surgical areas had a higher response mean than nurses in medical areas regarding the ideal purpose of identifying unusual occurrences requiring investigation. Nurses in the ICU had a higher response mean than nurses in either surgery or medicine regarding the ideal purpose identifying policy and procedures requiring revision. Nurses in medical areas had a significantly higher response mean than nurses in the ICU regarding the ideal purpose related to assessing the hospital's insurance premiums. Finally, medical and surgical areas had respectively higher response means than the ICU regarding both actual and ideal purposes related to providing evidence in lawsuits.

Nurses were divided into three groups according to number of years worked in current area. Nurses with more than six years' experience in their area had a higher mean score than nurses with one to six years' experience regarding the actual and ideal purpose of using incident report information as guidelines for decisions to revise policies and procedures. Nurses in the former group also scored significantly higher (0.05) than did nurses with less than one year of experience regarding the ideal of this purpose. Table 5.4 shows these findings.

Table 5.5 shows the findings of the analysis of variance and Scheffe procedure for nurses' perceptions of

TABLE 5.3

Differences Among Nurses' Perceptions of Actual and Ideal Purposes of Incident Reporting by Area

Purpose		Mean Score			F-Ratio	Probability	Pairs Significantly Different
		Group 1 Medicine	Group 2 Surgery	Group 3 1CU			
Identify unusual occurrences	Ideal	4.02	4.36	4.31	4.33	0.01	2>1
Revise policy/procedures	Ideal	3.75	3.75	4.27	3.57	0.03	3>1 3>2
Assess insurance premium	Ideal	3.22	2.89	2.65	3.37	0.04	1>3
Medical-legal claims	Ideal	3.53	3.56	3.00	3.09	0.05	1>3 2>3
Evidence in lawsuits	Actual	3.61	3.49	3.04	3.49	0.03	1 3
	Ideal	3.68	3.77	3.15	3.23	0.04	2 3

TABLE 5.4

Differences Among Nurses' Perceptions of Actual and Ideal Purposes of Incident Reporting by Years in Area

Purpose		Mean Score			F-Ratio	Probability	Pairs Significantly Different
		Group 1 <1	Group 2 1 to 6	Group 3 >6			
Revise policy/procedures	Actual	2.89	3.19	3.48	3.84	0.02	3>2
	Ideal	3.71	3.76	4.19	3.05	0.05	3>1 3>2

TABLE 5.5

Differences Among Nurses' Perceptions of Actual and Ideal Purposes of Incident Reporting by Years in Profession

Purpose		Mean Score Group 1 <1	 Group 2 1 to 6	 Group 3 >6	F-Ratio	Probability	Pairs Significantly Different
Identify staff inservice needs	Actual	2.91	2.86	3.26	3.15	0.05	3>2
Evidence in lawsuits	Actual	3.91	3.32	3.44	3.45	0.03	1>2

TABLE 5.6

Differences Between Nurses' Perceptions of Actual and Ideal Purposes of Incident Reporting by Other Positions Held

Purpose		Mean Score Group 1 Staff Nurse	 Group 2 Other	t-Value	Probability
Identify unsafe patient environment	Actual	3.62	4.14	3.21	0.01
	Ideal	4.02	4.43	2.54	0.02
Identify staff inservice needs	Actual	2.92	3.50	2.17	0.03

purposes of incident reporting according to the three categories of years in profession. Nurses differed significantly regarding the actual purposes of incident reporting related to identifying inservice needs and providing evidence in lawsuits. Nurses with more than six years' experience had a significantly higher mean score than did nurses with one to six years' experience regarding the purpose identifying inservice needs. Nurses with less than one year's experience had a significantly higher mean than did nurses with one to six years' experience regarding the actual purpose of providing evidence in lawsuits.

Table 5.6 shows the t-test results for nurses' perceptions of purposes of incident reporting according to two categories of previously held positions. Regarding the actual and ideal purpose, identifying unsafe patient care environments, nurses differed significantly at the 0.01 and 0.05 level, respectively. The "other" nurse group tended to agree more strongly than did the staff nurse group with this purpose. Regarding the actual purpose identifying inservice needs, the "other" nurse group tended to agree more strongly than did the staff nurse group.

Table 5.7 shows the t-test findings for nurses' perceptions of incident reporting according to level of education. Nurses were divided into two categories: RN diploma, and baccalaureate and/or other. The mean response scores of baccalaureate level nurses were significantly higher than were the mean response scores of diploma nurses on the following six items: actual and ideal purposes,

TABLE 5.7

Differences Between Nurses' Perceptions of Actual and Ideal Purposes of Incident Reporting by Level of Education

		Mean Score			
Purpose		Group 1 Diploma	Group 2 Baccalaureate	t-Value	Probability
Identify staff inservice needs	Actual	2.96	3.65	2.80	0.01
	Ideal	3.69	4.35	3.87	0.001
Identify unsafe nursing practice	Actual	3.40	4.18	3.09	0.01
Revise policy/procedures	Ideal	3.75	4.52	5.27	0.001
Statistical/trend analyses	Actual	3.67	4.06	2.34	0.02
	Ideal	4.04	4.59	3.17	0.01

TABLE 5.8

Differences Between Nurses' Perceptions of Actual and Ideal Purposes of Incident Reporting by Professional Score

		Mean Score			
Purpose		Group 1 Below Mean	Group 2 Above Mean	t-Value	Probability
Identify staff inservice needs	Ideal	3.96	3.60	2.42	0.05

identifying inservice needs and analyzing statistics to identify trends in incidents; actual purpose, identifying unsafe nursing practice; and ideal purpose, revising policy and procedures.

Nurses were divided into two categories according to their scores in professionalism: above the mean (less professional), and equal to and below the mean (more professional). Nurses differed significantly at the 0.05 level according to the ideal purpose identifying inservice needs for nursing staff. Nurses who scored lower professionally tended to agree less that this should be an ideal purpose for incident reporting than those nurses who scored higher professionally. Table 5.8 shows these findings.

Differences in perceptions. The findings discussed in Chapter 3 indicated that nurse-supervisors were older, had more experience and education, and were more professional overall than staff nurses. Nurse-supervisors and staff nurses did not have many significantly different viewpoints regarding purposes of incident reporting. Nurse-supervisors, having spent time in the organization as staff nurses, would be as familiar with the practices surrounding incident reporting as their subordinates of the same age and experience. This would also explain the reason years in current position demonstrated no significant effects on nurses' perceptions. Level of education and area produced the greatest number of significant differences among the nurse groups' perceptions of the listed purposes. This would seem to imply that an area's use of incident reports varies along with nurses' needs and nurse-supervisors' expectations. Grier and Schnitzlers' (1979) research showed that baccalaureate nurses had a higher level of problem-solving skill. Because of their problem-solving abilities, nurses with baccalaureate education may have perceived a greater number of ways in which incident report data could be used. The findings also indicate that the policy itself may require re-evaluation since it may not have met the implementation needs of the nurses in their practice areas.

The actual purpose, identifying inservice needs for staff, differentiated among nurse groups on the majority of variables. Nurses with greater experience and more education may have evaluated the adequacy of education programs related to risk management according to their individual needs which had already been satisfied through their extensive work experience and formal educational experiences. Nurses with less work experience perceived a greater need for formal education in risk management, and they perceived that the hospital did not adequately fulfill that need considering their experience and limited exposure to additional educational programs. Use of incident reports to revise policy and procedure and to assess potential medical-legal claims were other purposes that were differentiated among groups comprising the independent variables. Nurses who had more experience, additional educational and professional interest were more likely to be in administrative positions. Nurses in administrative positions had better access to information related to administrations use of reports than did those with less experience, education, and professional maturity.

Situations Requiring Incident Reporting

The significant findings of Chi Square analysis of nurses' perceptions of situations requiring incident reporting according to personal and professional independent variables are presented in this section. The significant findings are reported in separate tables. Analysis using the independent variable, other positions held, revealed no significant relationships.

The results of Chi Square analysis were interpreted as discussed in Chapter 4. Yates' correction was used where expected cell frequencies were less than five.

Sub-Problem 9

What are the significant personal and professional variables influencing nurses' perceptions regarding situations requiring completion of an incident report?

Nurses' perceptions. In Table 5.9 nurses were divided into four categories according to age. Nurses forty years or more were more likely to report a discontinued medication being given than were nurses forty years and younger. Nurses in these same categories showed similar differences in reporting a drug reaction that developed after a medication was given by a nurse. Regarding a drug reaction after an intravenous medication was given by a physician, nurses thirty years or younger were less likely to report than were

TABLE 5.9

Differences Among Nurses' Perceptions of Situations Requiring Incident Reporting by Age

Situation		Percentage Distribution				Chi-Square	Probability
		Group 1 <25	Group 2 26 to 30	Group 3 31 to 40	Group 4 >40		
Discontinued medication administered	No	7.5	7.9	-	-	12.81	0.05
	Uncertain	32.1	26.3	41.7	12.9		
	Yes	60.4	65.8	58.3	87.1		
Drug reaction, nurse administered	No	60.4	55.3	44.4	32.3	13.63	0.03
	Uncertain	28.3	18.4	27.8	22.6		
	Yes	11.3	26.3	27.8	45.2		
Drug reaction, doctor administered	No	41.5	36.8	19.4	16.1	18.02	0.01
	Uncertain	32.1	31.6	44.4	67.7		
	Yes	26.4	31.6	36.1	16.1		

TABLE 5.10

Differences Between Nurses' Perceptions of Situations Requiring Incident Reporting by Position

Situation		Percentage Distribution		Chi-Square	Probability
		Group 1 Staff Nurse	Group 2 Nurse-Supervisor		
Drug reaction, doctor administered	No	34.6	4.5	19.12	0.001
	Uncertain	32.4	81.8		
	Yes	33.1	13.6		
Nurse injures back	No	4.4	40.9	35.78	0.001
	Uncertain	5.9	18.2		
	Yes	89.7	40.9		

nurses above thirty years.

Table 5.10 shows that nurses were divided into two categories according to position. Staff nurses were divided in their perceptions as to reporting a physician giving an intravenous medication that caused injury to a patient. The majority of nurse-supervisors were uncertain about reporting the incident. The majority of staff nurses would have reported a nurse's back injury, while nurse-supervisors tended to be equally divided in their decision to report or not to report this incident.

In Table 5.11, significant findings for nurses' perceptions of situations requiring incident reporting are shown according to the three groups comprising current area of practice. Nurses in the ICU were more likely to report a missed dose of a medication and a medication given an hour late than were nurses in medicine or surgery. The majority of nurses in the ICU would not report "paddle burns" a patient received during cardioversion, as compared to nurses in medicine and surgery. Nurses in medical and surgical areas were more likely not to report a patient discharging himself than were nurses in the ICU. Nurses in medical-surgical areas were less likely to report being placed in charge of an unfamiliar unit or being understaffed than were nurses in the ICU. Regarding equipment malfunction, nurses in medical areas were more likely to report a Gomco machine malfunction than were nurses in surgery or the ICU.

Nurses were divided into three groups according to years in current position. According to Table 5.12, nurses

TABLE 5.11

Differences Among Nurses' Perceptions of Situations Requiring Incident Reporting by Area

Situation		Percentage Distribution			Chi-Square	Probability
		Group 1 Medicine	Group 2 Surgery	Group 3 ICU		
Dose missed	No	19.7	9.9	-	11.10	0.03
	Uncertain	18.0	32.4	19.2		
	Yes	62.3	57.7	80.8		
Dose administered one hour late	No	63.9	74.6	34.6	13.65	0.01
	Uncertain	29.5	21.1	50.0		
	Yes	6.6	4.2	15.4		
Burns received during resuscitation	No	24.6	19.7	69.2	29.10	0.001
	Uncertain	39.3	29.6	26.9		
	Yes	36.1	50.7	3.8		
Patient discharges self	No	83.3	77.5	57.7	12.25	0.02
	Uncertain	8.3	16.9	15.4		
	Yes	8.3	5.6	26.9		
Charge of unfamiliar area	No	58.3	54.9	19.2	18.21	0.01
	Uncertain	28.3	33.8	38.5		
	Yes	13.3	11.3	42.3		
Unit understaffed	No	58.3	50.7	30.8	14.79	0.01
	Uncertain	25.0	38.0	26.9		
	Yes	16.7	11.3	42.3		
Gomco machine malfunctions	No	19.7	40.8	34.6	10.25	0.04
	Uncertain	27.9	26.8	38.3		
	Yes	52.5	32.4	26.9		

TABLE 5.12

Differences Among Nurses' Perceptions of Situations Requiring Incident Reporting by Years in Position

Situation		Percentage Distribution			Chi-Square	Probability
		Group 1 <1	Group 2 1 to 6	Group 3 >6		
Patient property lost	No	9.5	3.5	-	9.39	0.05
	Uncertain	19.0	3.3	19.8		
	Yes	71.4	96.7	76.7		

TABLE 5.13

Differences Among Nurses' Perceptions of Situations Requiring Incident Reporting by Years in Area

Situation		Percentage Distribution			Chi-Square	Probability
		Group 1 <1	Group 2 1 to 6	Group 3 >6		
Drug reaction, doctor administered	No	41.0	31.4	15.2	13.77	0.01
	Uncertain	30.8	33.7	18.2		
	Yes	28.2	34.9	66.7		

in their current position one to six years were more likely to complete an incident report if a patient lost personal property than either nurses with less than one year or those over six years of experience. There were no other differences among nurses' perceptions of situations requiring incident reporting by years in position.

Table 5.13 shows nurses were divided into three groups according to years in current area. Nurses who had worked in their area more than six years were more likely to document a physician's improper administration of a medication on an incident report than were those who had worked six years or less. Nurses with one to six years' experience in their current area were evenly divided in their perceptions as how to respond to this situation.

Nurses were divided into three groups according to years in the nursing profession. Nurses with less than one year of experience were less likely to complete an incident report if a patient reacted to a medication administered by a nurse or doctor than were nurses with one or more years of experience. Ninety-one percent of the nurses with over six years' experience would report a patient's lost property on an incident form, while nurses with less experience were less likely to do so. Table 5.14 shows these findings.

Nurses were divided into two groups according to level of education: diploma and baccalaureate (Table 5.15). Some baccalaureate nurses were uncertain regarding reporting giving a wrong medication, while diploma nurses always reported such a situation. Significantly more baccalaureate

TABLE 5.14

Differences Among Nurses' Perceptions of Situations Requiring Incident Reporting by Years in Profession

		Percentage Distribution				
Situation		Group 1 <1	Group 2 1 to 6	Group 3 >6	Chi-Square	Probability
Drug reaction, nurse administered	No	82.6	44.3	44.6	12.19	0.02
	Uncertain	8.7	30.0	24.6		
	Yes	8.7	25.7	30.8		
Drug reaction, doctor administered	No	47.8	34.3	20.0	13.10	0.02
	Uncertain	30.4	34.3	24.6		
	Yes	21.7	31.4	55.4		
Patient property lost	No	13.0	2.9	3.1	14.03	0.01
	Uncertain	26.1	22.9	6.2		
	Yes	60.9	74.3	90.8		

TABLE 5.15

Differences Between Nurses' Perceptions of Situations Requiring Incident Reporting by Level of Education

Situation		Percentage Distribution Group 1 Diploma	Percentage Distribution Group 2 Baccalaureate	Chi-Square	Probability
Wrong medication administered	No	0.7	-	8.46	0.02
	Uncertain	-	5.9		
	Yes	99.3	94.1		
Defects in sterile packaging	No	56.7	29.4	10.72	0.01
	Uncertain	22.0	58.8		
	Yes	21.3	11.8		
Stat report late	No	52.5	-	18.33	0.001
	Uncertain	30.5	76.5		
	Yes	17.0	23.5		

TABLE 5.16

Differences Between Nurses' Perceptions of Situations Requiring Incident Reporting by Professional Score

Situation		Percentage Distribution Group 1 Below Mean	Percentage Distribution Group 2 Above Mean	Chi-Square	Probability
Dose missed	No	8.9	15.2	6.98	0.03
	Uncertain	17.7	31.6		
	Yes	73.4	53.2		

nurses were uncertain regarding reporting defects in sterile packaging and reporting a tardy emergency report, while diploma nurses tended not to report these situations.

Nurses differed significantly according to their professionalism score in reporting only one situation: missing a dose of a prescribed medication. Nurses who were less professional (above the mean professional score) were more uncertain regarding completing a report, while nurses who were more professional tended to complete an incident report for this situation (Table 5.16).

Discussion. Area of nursing produced the highest number of significant differences among nurses' perceptions of situations requiring incident reporting. Wasuita (1982) found that reporting differed among areas because perceptions regarding what were routine occurrences and what were incidents among nurses varied. Climate also tended to determine what situations were reported. Administrative attitudes and expectations regarding professional accountablility and responsibility in nursing practice also influence the nurse's reporting behavior (Johnson,1971; and Georgopoulous,1966).

The situation which differentiated among nurse groups on most variables was a medication reaction following administration by a physician. Nurses who were younger, had less experience, and were not in a position of authority tended not to report the physician. These nurses most likely believed they did not have the authority nor the assertive skills to "correct" a physician's behavior, nor did they have confidence in their knowledge to assess the degree of impropriety of a situation.

Medication errors, as a whole, also differentiated significantly among most nurse groups. Although nurses are initially socialized as to the importance of reporting all medication errors as students, and despite policy requiring all medication errors to be reported, nurses of different age, education, and area tended to be selective as to the types of medication errors they reported.

The findings for nurses' perceptions of situations requiring incident reporting indicated that nurses varied as to the situations they would report (Chapter 4). The findings in this section indicated that there were only a small number of situations (listed in the tables) where nurses differed significantly in their perceptions regarding situations they would have reported.

In Chapter 4 it was reported that 50 percent of the nurses agreed that an incident report should be completed whenever policy or procedure was not followed and 62 percent, whenever an unusual situation occurred. The literature on risk management and legalities in the health care system indicates that all situations listed in the tables should be recorded on an incident form. It appears that nurses may become accustomed to unusual situations in their area if they routinely occur, so much so that the situation is no longer unusual. The longer that nurses work in the hospital, the more they are also aware of the limits to which policy is applied. Despite policy requiring that all incidents be reported, the findings revealed that not all nurses followed policy guidelines.

Guidelines for Incident Reporting

This section presents the significant differences between and among group means belonging to each variable related to nurses' perceptions of the frequency with which guidelines were met in their area. Nurses' perceptions of guidelines were not significantly differentiated by age, years in current position, years in area, or professionalism score.

Sub-Problem 10

What are the personal and professional variables influencing nurses' perceptions of the frequency with which guidelines for incident reporting are practised?

Table 5.17 shows differences among nurses' perceptions of guidelines according to position: staff nurse and nurse-supervisor. Staff nurses tended to perceive higher use than did nurse-supervisors for the following guidelines: documenting an accurate patient assessment, completing the entire report in twenty-four hours, and documenting completion of the report on the nurses' notes.

Table 5.18 shows the significant findings related to area of practice. Respondents in both medical and surgical areas tended to perceive documenting the completion of an incident report on the nurses' notes as applied more frequently than did ICU nurses. Nurses in surgery areas perceived confidentiality as being used significantly more

TABLE 5.17

Differences Between Nurses' Perceptions of Guidelines for Incident Reporting by Position

Guideline	Mean Score		t-Value	Probability
	Group 1 Staff Nurse	Group 2 Nurse-Supervisor		
Patient assessment recorded	3.53	3.18	2.34	0.03
Completed in 24 hours	3.07	2.52	3.43	0.001
Report recorded on nurses' notes	2.90	2.29	2.56	0.02

TABLE 5.18

Differences Among Nurses' Perceptions of Guidelines for Incident Reporting by Area

Guideline	Mean Score			F-Ratio	Probability	Pairs Significantly Different
	Group 1 Medicine	Group 2 Surgery	Group 3 ICU			
Incident recorded on nurses' notes	3.62	3.54	3.04	7.82	0.001	1 3 2 3
Confidentiality maintained	3.00	3.21	2.58	3.72	0.03	2 3

often than did nurses in the ICU.

Nurses were divided into three groups according to years worked in the nursing profession (Table 5.19). Nurses who had more than six years' experience in the nursing profession perceived notations and signatures by required persons as almost always being used, while nurses with one to six years' experience perceived this guideline as being applied less frequently.

Nurses were divided into two groups according to previously held positions (Table 5.20). Nurses who had held other nursing positions perceived that an accurate description of the incident was documented on the nurse's notes as being used in their areas less frequently than did nurses who had held only staff nurse positions.

Table 5.21 shows the significant differences between groups according to level of education. Regarding the guidelines related to documentation of an accurate description of the incident and pertinent patient assessment on the nurses' notes, nurses with baccalaureate or higher education indicated a significantly lower utilization than did nurses with a diploma level of education.

Discussion. The findings regarding the frequency of use of guidelines for incident reporting leads to the conclusion that nurse-supervisors who were generally more experienced and higher educated than were staff nurses tended to perceive some guidelines as less consistently used in the hospital than their respective counterparts. Generally, differences among the nurse groups for the significant

TABLE 5.19

Differences Among Nurses' Perceptions of Guidelines for Incident Reporting by Years in Profession

Guideline	Mean Score Group 1 <1	 Group 2 1 to 6	 Group 3 >6	F-Ratio	Probability	Pairs Significantly Different
Appropriate signatures/notations	3.86	3.62	3.83	4.14	0.02	3>2

TABLE 5.20

Differences Between Nurses' Perceptions of Guidelines for Incident Reporting by Other Positions Held

Guideline	Mean Score Group 1 Staff Nurse	 Group 2 Other	t-Value	Probability
Incident recorded on nurses' notes	3.48	4.00	2.87	0.01

TABLE 5.21

Differences Between Nurses' Perceptions of Guidelines for Incident Reporting by Level of Education

Guideline	Mean Score Group 1 Diploma	 Group 2 Baccalaureate	t-Value	Probability
Accurate description of incident	3.73	3.35	3.14	0.01
Patient assessment recorded	3.52	3.13	2.32	0.03

variables were related to the guidelines of accurate, pertinent, and concise documentation of the incident on the report and patient record. Wasuita (1982) and Philpott (1985) suggest strict guidelines for incident reporting in order to ensure all necessary information is assimilated according to institutional quality assurance needs and legal requirements.

Differences in the nurse groups' assessments of the frequency that guidelines are used may mean that expectations have not been stated clearly enough nor adequately enforced. Particularly reliable and valid evaluation and investigation of safety in patient care and nursing practice is difficult when guidelines for reporting are not adhered to uniformly. Of importance is the fact that nurse-supervisors and/or nurses with additional experience in other positions tended to perceive that completion of a report is infrequently charted on the nurses' notes. Staff nurses indicated they charted the reports existence more often than their supervisors were aware. Rozovsky (1979) cautions against this practice under the rules of discovery as discussed in Chapter 2.

When legal or insurance claims arise the hospital's position may be jeopardized because established protocol has not been followed. The fact that confidentiality was not consistently maintained may have also affected legal privileges. In addition, the laxity surrounding confidentiality may have exposed nurses to peer or supervisor criticism and evaluation that was not necessarily constructive or supportive.

Processing of Incident Reports

This section presents the differences among nurses' perceptions of the actual and ideal processing of incident reports according to personal and professional variables. Only significant differences between and among group means belonging to each variable are reported. Area and level of education did not reveal any significant differences among nurses' perceptions of the processing of incident reports.

Sub-Problem 11

What are the personal and professional variables that significantly influence nurses' perceptions regarding actual and ideal processing of incident reports?

Nurses' perceptions. Table 5.22 shows the significant differences among nurses' perceptions of incident reporting processing according to four age groups. Nurses thirty-one to forty years old perceived a significantly higher frequency of report information being discussed at area meetings than did nurses under 26 years of age. Nurses in the former age category also perceived a significantly higher frequency of interdepartmental coordination of report information occurring than did nurses twenty-six to thirty years of age.

Table 5.23 shows differences in perceptions between staff nurses and nurse-supervisors regarding the following processes: actual and ideal receiving of area summary reports, actual and ideal discussion of information at area

TABLE 5.22

Differences Among Nurses' Perceptions of Actual and Ideal Processing of Incident Reports by Age

Processing Activities		Mean Score Group 1 <26	Group 2 26 to 30	Group 3 31 to 40	Group 4 >40	F-Ratio	Probability	Pairs Significantly Different
Reports reviewed at unit meetings	Ideal	3.33	3.47	3.77	3.59	2.73	0.05	3>1
Coordinate inter-department safety objectives	Actual	2.63	2.12	3.11	2.45	3.72	0.02	3>2

TABLE 5.23

Differences Between Nurses' Perceptions of Actual and Ideal Processing of Incident Reports by Position

Processing Activities		Mean Score Group 1 Staff Nurse	Group 2 Nurse-Supervisor	t-Value	Probability
Unit summary reports received	Actual	1.79	3.14	6.20	0.001
	Ideal	3.49	4.00	2.94	0.01
Reports reviewed at unit meetings	Actual	1.90	2.43	2.69	0.01
	Ideal	3.48	3.73	2.05	0.05
Report data used to evaluate patient safety	Ideal	3.60	3.94	3.30	0.01
Coordinate interdepartment safety objectives	Ideal	3.60	3.94	3.94	0.001

meetings, ideal evaluation of safety in the area or in the hospital, and ideal process of coordination among departments of objectives for safety. Nurse-supervisors perceived significantly higher activity levels in each of these incident reporting processes.

Nurses were divided into three groups acording to years of experience in current position (Table 5.24). Nurses differed significantly regarding actually receiving of area summary reports. Nurses with six years' or more experience in their position perceived a higher frequency than did nurses with one to six years' experience and nurses with less than one year of experience. These same differences were observed among nurses who were divided into three groups according to years in current area (Table 5.25).

Table 5.26 shows significant differences among groups according to the number of years in the nursing profession. Nurses with more than six years' experience perceived a significantly higher frequency for the area receiving summary reports than did nurses with one to six years' experience. Nurses with one to six years' experience perceived a significantly higher frequency for supervisors keeping statistical and anecdotal records of incidents occurring in the area than did nurses with more than six years' experience.

Nurses who had held positions other than their current position had significantly different perceptions of the processing of incident reports than did those with no additional experience (Table 5.27). Nurses with previous

TABLE 5.24

Differences Among Nurses' Perceptions of Actual and Ideal Processing of Incident Reports by Years in Position

		Mean Score					
Processing Activities		Group 1 <1	Group 2 1 to 6	Group 3 >6	F-Ratio	Probability	Pairs Significantly Different
Unit summary reports received	Actual	1.77	1.94	2.5	4.01	0.02	3>1

TABLE 5.25

Differences Among Nurses' Perceptions of Actual and Ideal Processing of Incident Reports by Years in Area

		Mean Score					
Processing Activities		Group 1 <1	Group 2 1 to 6	Group 3 >6	F-Ratio	Probability	Pairs Significantly Different
Unit summary reports received	Actual	1.66	1.97	2.47	4.89	0.01	3>1

TABLE 5.26

Differences Among Nurses' Perceptions of Actual and Ideal Processing of Incident Reports by Years in Profession

		Mean Score					
Processing Activities		Group 1 <1	Group 2 1 to 6	Group 3 >6	F-Ratio	Probability	Pairs Significantly Different
Unit summary reports received	Actual	1.88	1.70	2.37	6.19	0.01	3>2
Statistical/anecdotal records kept by supervisor	Ideal	3.44	3.82	3.47	3.58	0.04	2>3

TABLE 5.27

Differences Between Nurses' Perceptions of Actual and Ideal Processing of Incident Reports by Other Positions Held

Processing Activities		Mean Score		t-Value	Probability
		Group 1 Staff Nurse	Group 2 Other		
Coordinate interdepartment safety objectives	Ideal	3.59	3.89	2.27	0.04
Identify staff inservice needs	Ideal	3.58	3.89	2.29	0.04

TABLE 5.28

Differences Between Nurses' Perceptions of Actual and Ideal Processing of Incident Reports by Professional Score

Processing Activities		Mean Score		t-Value	Probability
		Group 1 Below Mean	Group 2 Above Mean		
Unit summary reports received	Actual	2.22	1.77	2.45	0.02
Coordinate interdepartment safety objectives	Ideal	3.78	3.49	2.30	0.03
Set storage period in medical records	Ideal	3.41	3.84	2.68	0.01

experiences perceived a significantly higher occurrence of the following ideal processes: coordinating interdepartmental objectives for safety and identifying inservice needs.

The results of t-test analysis revealed significant differences regarding nurses' perceptions of the processing of incident reports by professional score. Table 5.28 shows the significant differences between nurses scoring above and those scoring below the professional mean score. Nurses with a high professional score (below the mean) perceived a higher frequency for actually receiving regular summary reports than did nurses with a low professional score (above the mean). Nurses who were more professional (below the mean) also perceived a higher frequency for ideally coordinating interdepartmental objectives for safety, but they perceived a lower frequency for ideally storing incident reports in medical records than did nurses who were less professional(above the mean).

Discussion. Generally nurses who were older, had extensive nursing experience, and were more professional perceived that the processing of incident report information occurred at a significantly higher level than did their younger and less experienced and professional colleagues. Since these characteristics generally described the majority of nurse-supervisors, one may also conclude that nurse-supervisors had a more idealistic perception of the processing activities surrounding incident report data than did staff nurses. Current position, as an independent variable, differentiated the two nurse groups for the greatest number of processing activities. In particular, staff nurses perceived significant differences regarding the frequency of sharing incident report data at the area level than did nurse-supervisors. This processing activity was perceived as significantly different among most of the nurse groups comprising the significant independent variables. It also appeared that staff nurses perceived themselves as less involved in the sharing of incident report data than did nurse-supervisors.

Coordinating interdepartmental objectives for safety, actually and ideally, was similarly affected by personal and professional variables. The activities of nurse-supervisors regarding incident report data are probably not shared with the majority of staff nurses. The question arises whether other departments in the hospital operate in the same manner regarding communicating summary report information. Overall, risk management may have appeared non-existent or non-productive to the majority of staff nurses in the sample. This would explain staff nurses' apathy and possible suspicion of purposes and outcomes surrounding incident reporting if such circumstances existed in the hospital.

Area and education had no significant effect on nurses' perceptions of the frequency incident report data were processed. These findings would seem to suggest that most processing activities were similar in the areas surveyed. Level of education did not differentiate among the nurse groups since hospital guidelines for processing data did not encourage and support nurses using information in a problem-solving approach. The demographic findings in Chapter 4 also indicated nurse-supervisors in this sample tended to be more bureaucratic (task) orientated rather than profession (process) orientated. However, other professional factors in combination with education effectively differentiated among some nurses as to the manner in which they processed incident reports. Perhaps greater professional affiliation was required, rather than education alone, to encourage nurses to act independently and constructively in processing incident report data.

Factors Influencing Incident Reporting

Nurses' perceptions of the factors influencing incident reporting were determined by the results of t-test analysis and analysis of variance. Only those items where significant differences were observed are reported.

Sub-Problem 12

What are the personal and professional variables that significantly influence nurses' perceptions of factors influencing incident reporting?

Table 5.29 summarizes the significant findings according to age. Both nurses over forty years of age and those under 26 perceived that hospital policy was significantly more influential in their decision to complete an incident report than did nurses between twenty-six and thirty.

TABLE 5.29

Differences Among Nurses' Perceptions of Factors Influencing Incident Reporting by Age

	Mean Score						
Factors	Group 1 <26	Group 2 26 to 30	Group 3 31 to 40	Group 4 >40	F-Ratio	Probability	Pairs Significantly Different
Responsibility to hospital	3.00	2.57	2.86	3.07	4.11	0.01	1>2 4>2

TABLE 5.30

Differences Between Nurses' Perceptions of Factors Influencing Incident Reporting by Position

	Mean Score			
Factors	Group 1 Staff Nurse	Group 2 Nurse-Supervisor	t-Value	Probability
Responsibility to hospital	2.83	3.20	3.39	0.01
More inclined if able to express opinion	2.76	2.36	2.45	0.02

TABLE 5.31

Differences Among Nurses' Perceptions of Factors Influencing Incident Reporting by Area

	Mean Score					
Factors	Group 1 Medicine	Group 2 Surgery	Group 3 ICU	F-Ratio	Probability	Pairs Significantly Different
More inclined if policies realistic	3.03	3.24	3.42	4.69	0.02	3>1

TABLE 5.32

Differences Among Nurses' Perceptions of Factors Influencing Incident Reporting by Years in Position

Factors	Mean Score Group 1 <1	 Group 2 1 to 6	 Group 3 >6	F-Ratio	Probability	Pairs Significantly Different
Influenced by opinion of:						
1) Colleagues	2.76	2.60	2.28	4.07	0.02	1>3 2>3
2) Supervisor	3.29	3.11	2.83	3.78	0.03	1>3
More inclined if policies realistic	3.17	3.29	2.93	4.29	0.02	2>3

TABLE 5.33

Differences Among Nurses' Perceptions of Factors Influencing Incident Reporting by Years in Area

Factors	Mean Score Group 1 <1	 Group 2 1 to 6	 Group 3 >6	F-Ratio	Probability	Pairs Significantly Different
Opinion of colleagues	2.79	2.63	2.19	6.89	0.001	1>3 2>3
Responsibility to hospital	2.87	2.77	3.16	3.83	0.03	3>2
Less inclined if:						
1) Uncertain how to complete	1.87	2.13	2.34	3.64	0.03	3>1
2) Fearful of evaluation	2.26	2.06	1.87	3.28	0.04	1>3
Workload	2.32	2.20	1.87	3.06	0.05	1>3

Nurse-supervisors perceived that responsibility to the hospital was more important in their decision to complete an incident report than did staff nurses. Staff nurses perceived that expressing a personal opinion in completing an incident report was more important than did nurse-supervisors (Table 5.30).

Table 5.31 shows the significant differences among nurses' perceptions of factors influencing incident reporting by area of nursing. Nurses in the ICU indicated that realistic incident reporting policies were significantly more influential in their willingness to complete an incident report than did nurses in medical areas.

As shown in Table 5.32, years in current position influenced significantly nurses' perceptions of three factors influencing incident reporting. Nurses with more than six years' experience perceived that the opinion of colleagues, the supervisor, and realistic and practical policies influenced their decision to complete a report significantly less than did those with lesser experience.

The professional variable, years in current area, produced several significant findings related to factors influencing incident reporting (Table 5.33). Nurses with less than one year of experience in their current area perceived that the following factors influenced their decision to complete an incident report: colleague's opinion, fear of evaluation, and size of workload, significantly more often than did nurses with over six years' experience. Nurses with over six years' experience perceived that responsibility to the hospital and uncertainty regarding completing the report were significantly more influential in their decision to complete a report than did less experienced nurses.

Nurses differed significantly in their perceptions regarding three factors influencing incident reporting according to number of years in the nursing profession. Table 5.34 summarizes these findings. Nurses who had less nursing experience agreed significantly more strongly that the opinion of colleagues, responsibility to the hospital and to the profession, and knowledge of the purpose of reporting were influential in their decision to complete a report than did nurses who had six years of nursing experience.

Nurses who had previous experience in other nursing positions indicated that uncertainty regarding documentation influenced their inclination to complete incident reports significantly more than did nurses with only staff nurse experience (Table 5.35).

Table 5.36 shows two significant findings relating nurses' perceptions of incident reporting to their professional score. Nurses who tended to be more professional (below the mean) were less influenced by policy and more by workload than were nurses who tended to be less professional (above the mean).

Nurses with different levels of education showed significant differences in their perceptions regarding who

TABLE 5.34

Differences Among Nurses' Perceptions of Factors Influencing Incident Reporting by Years in Profession

Factors	Mean Score Group 1 <1	 Group 2 1 to 6	 Group 3 >6	F-Ratio	Probability	Pairs Significantly Different
Influenced by opinion of colleagues	2.86	2.68	2.37	5.39	0.01	1>3 2>3
Responsibility to:						
1) Hospital	3.09	2.73	2.97	3.38	0.04	1>2
2) Profession	3.50	3.11	3.20	4.20	0.02	1>2 1>3
More inclined if understands purpose	3.09	3.17	2.84	5.04	0.01	2>3

TABLE 5.35

Differences Between Nurses' Perceptions of Factors
Influencing Incident Reporting by Other Positions Held

Factors	Mean Score Group 1 Staff Nurse	 Group 2 Other	t-Value	Probability
Less inclined if uncertain how to complete	2.02	2.54	2.41	0.02

TABLE 5.36

Differences Between Nurses' Perceptions of Factors Influencing Incident Reporting by Professional Score

	Mean Score			
Factor	Group 1 Below Mean	Group 3 Above Mean	t-Value	Probability
More inclined if policy practical	3.45	3.25	2.16	0.04
Workload	2.03	2.30	2.16	0.04

TABLE 5.37

Differences Between Nurses' Perceptions of Factors Influencing Incident Reporting by Level of Education

	Mean Score			
Factor	Group 1 Diploma	Group 2 Baccalaureate	t-Value	Probability
Report completed by:				
1) Nurse responsible	3.30	3.71	2.20	0.03
2) Nurse discovering the incident	3.33	3.65	2.41	0.02

should complete an incident report. Nurses with baccalaureate education perceived that the incident report should be completed by the nurse responsible for the incident and/or the nurse who discovered the incident significantly more strongly than did diploma nurses (Table 5.37).

Discussion. A variety of factors in the practice setting influenced nurses' decisions to complete a report. Good policy should reduce the effect of extraneous factors in decision-making, and it should ensure greater uniformity in professional behavior.

The influencing factors in incident reporting affected by the greatest number of independent variables were the opinions' of colleagues and responsibility to the hospital. As nurses remained longer in the hospital their loyalty to professional ideals (collegial relationships) have been replaced by loyalty to the institution (authority relationship). Years in the area and in the profession created differentiation for the greatest number of items among nurse groups. Less experienced nurses may have been uncertain regarding policy content or may have observed practices that tended to conflict with policy statements. They would seek consultation with colleagues and/or the supervisor as to what action to take and, depending on the area or supervisor, possibly receive different directions. Less experienced nurses would also be less confident as to the limits of policy regarding autonomous practice and would tend to be influenced by a greater variety of factors than were more experienced nurses until the former were socialized into the hospital and/or area of practice.

Professionalism and education as influencing variables would determine the degree to which nurses would be influenced by policy or the professional ideals and educational skills enabling them to act autonomously. Nurses with a low professioal score (bureaucratic) would be influenced by policy more than professional nurses (high professional score) who tended to favor greater autonomy in decision-making than what policy would permit. This desire for independence would also be reflected in nurses using priority setting and problem solving under the pressure of increased workload. Professional nurses tended to be less mechanical in completing reports than did bureaucratic oriented nurses.

Nurses with a higher level of education tended to be more professional. The educational process these nurses undergo emphasizes personal accountability and responsibility, hence they would "own up" to errors they committed. According to Manthey (1980), nurses whose education had a strong hospital affiliation tended to favor shared responsibility and were not as eager to accept total ownership for errors and omissions. The findings in this section tended to indicate that as nurses remained longer in the hospital, the less influenced they were by the ideals of professional accountability and responsibility.

Overall Perceptions of Incident Reporting

Nurses rated their overall perceptions of incident reporting on a scale of one to five. Differences in perceptions according to personal and professional variables were examined by t-test analysis and one-way analysis of variance. Area of nursing practice, other nursing positions held, highest level of education, and professional score did not relate significantly to nurses' overall perceptions. Significant differences in perceptions by selected variables are shown in separate tables.

Sub-Problem 13

What are the significant personal and professional variables influencing nurses' overall perceptions of incident reporting?

Age was significantly related to nurses' overall perceptions of incident reporting on two factors. Nurses over forty years of age rated themselves significantly higher than did nurses who were younger regarding both understanding the purposes of incident reporting and knowledge of situations requiring incident reporting (Table 5.38).

Nurse-supervisors rated their understanding of the purposes of incident reporting, compliance with incident reporting policies, and knowledge of situations requiring reporting significantly higher than did staff nurses. Table 5.39 shows these findings.

Table 5.40 shows significant differences among nurses' overall perceptions of incident reporting by years in the

TABLE 5.38

Differences Among Nurses' Overall Perceptions of Incident Reporting by Age

Perception	Mean Score Group 1 <26	Group 2 26 to 30	Group 3 31 to 40	Group 4 >40	F-Ratio	Probability	Pairs Significantly Different
Understanding of purpose	3.33	3.27	3.56	3.81	3.87	0.02	4>1 4>2
Knowledge of situations requiring reporting	3.25	3.32	3.56	4.00	7.49	0.001	4>1 4>2

TABLE 5.39

Differences Between Nurses' Overall Perceptions of Incident Reporting by Position

Perception	Mean Score Group 1 Staff Nurse	Group 2 Nurse-Supervisor	t-Value	Probability
Understanding purpose	3.40	3.86	2.75	0.01
Frequency of compliance	3.53	4.09	4.18	0.001
Knowledge of situations requiring reporting	3.41	3.95	3.10	0.01

TABLE 5.40

Differences Among Nurses' Overall Perceptions of Incident Reporting by Years in Position

Perception	Mean Score Group 1 <1	 Group 2 1 to 6	 Group 3 >6	F-Ratio	Probability	Pairs Significantly Different
Understanding of purpose	3.44	3.32	3.90	7.11	0.001	3>1 3>2
Knowledge of situations requiring reporting	3.37	3.33	4.10	13.21	0.001	3>1 3>2
Satisfaction with guidelines	3.02	2.91	3.37	3.56	0.03	3>2
Effectiveness in quality assurance	2.88	2.59	3.03	3.38	0.04	3>2
Effectiveness in improving nursing practice	2.59	2.47	3.23	9.09	0.001	3>1 3>2
Satisfaction with policies	2.90	2.79	3.33	5.99	0.01	3>1 3>2

position. Nurses with more than six years' experience gave higher ratings than did nurses with less experience on the following factors: understanding of purposes of incident reporting, knowledge of situations requiring incident reporting, satisfaction with guidelines, improvement in patient care resulting from incident reporting, improvement in nursing practice, and satisfaction with current incident reporting policy.

Nurses who had been in their current area for more than six years also gave significantly higher ratings than did nurses with less experience on two factors: knowledge of situations requiring incident reporting and improvement in nursing practice (Table 5.41).

Table 5.42 shows the findings for nurses' overall perceptions of incident reporting according to years in the nursing profession. Nurses with more than six years in the profession rated their perceptions higher than did nurses with one to six years' experience on the following: knowledge of purpose and situations for reporting, improvement in nursing practice and quality assurance, and satisfaction with guidelines for incident reporting. Nurses with less than one year experience rated their perception of the effectiveness of incident reporting in promoting quality assurance higher than did nurses with one o six years' experience.

Discussion. The findings indicate that the longer nurses remained in the organization, the higher they tended to rate their knowledge, satisfaction, and evaluation of the

TABLE 5.41

Differences Among Nurses' Overall Perceptions of Incident Reporting by Years in Area

Perception	Mean Score Group 1 <1	 Group 2 1 to 6	 Group 3 >6	F-Ratio	Probability	Pairs Significantly Different
Knowledge of situations requiring reporting	3.39	3.39	3.85	4.67	0.02	3>1 3>2
Effectiveness in improving nursing practice	2.42	2.60	3.00	3.99	0.02	3>1

TABLE 5.42

Differences Among Nurses' Overall Perceptions of Incident Reporting by Years in Profession

Perception	Mean Score Group 1 <1	 Group 2 1 to 6	 Group 3 >6	F-Ratio	Probability	Pairs Significantly Different
Understanding of purpose	3.41	3.28	3.68	5.02	0.01	3>2
Knowledge of situations requiring reporting	3.36	3.28	3.75	7.09	0.001	3>2
Effectiveness in quality assurance	3.05	2.51	2.91	4.94	0.01	1>2 3>2
Effectiveness in improving nursing practice	2.59	2.47	2.85	3.05	0.05	3>2
Satisfaction with guidelines	3.05	2.74	3.08	3.67	0.03	3>2

incident reporting system. Years in position and years in the nursing profession differentiated more frequently among nurse groups than did any other variables. Understanding of the purposes and situations for incident reporting tended to be the most common factors differentiating among the various nurse groups for the significant independent variables.

Socialization enhances the nurse's comprehension of the policies and practices indigenous to a hospital. The nurse learns to adapt and use incident reporting structures in order effectively to attain personal and organizational goals. Nurse-supervisors, by their position in a hospital, tended to be more compliant with policy perhaps since they would be held more responsible and accountable. They also tended to be more supportive (and positive) about hospital policy structures, possibly because of the hospital's confidence in their loyalty and expertise. Their understanding of how the system operated and their successful ability to work within it may have also contributed to their support of the system's operation. They were perhaps less sensitive to the problem faced by staff nurses regarding incident reporting, or they had been ineffective in solving problems directly related to incident reporting which hampered staff nurses' ability to operate effectively within the system's guidelines.

Since professionalism did not differentiate among nurse groups regarding perceptions of overall factors related to incident reporting current policies and practices, it appeared that nurses had been given adequate leverage to practice within the confines of policy or that nurses in the overall sample did not particularly desire greater freedom in their decision-making. Level of education had some impact on nurses' overall satisfaction with operation of the system. Crisham (1981) noted that educationally impoverished environments did not seem to encourage nurses to examine their views and actions systematically. Grier and Schnitzler (1979) found that nurses with minimal educational preparation also tended to be content to work within environments that were structured and that provided limited options for behavior.

Summary

This chapter has presented the findings regarding significant differences among nurses' perceptions according to personal and professional variables and their influence on incident reporting. Statistical analyses were performed with the t-test procedure, one-way analysis of variance and Scheffe procedure, and Chi Square analysis regarding perceptions of purposes, situations, guidelines, processing, influencing factors, and overall perceptions related to incident reporting.

The analyses showed that all independent variables influenced nurses in some of their perceptions regarding the various components of the incident reporting process. For the most part, however, perceptions of the incident reporting process were not strongly related to the personal and professional variables of the respondents. The finding that perceptions were most strongly influenced by position and experience may be important to the actual incident reporting system in the hospital.

The independent professional variable, years in current position, did not significantly differentiate among nurse groups regarding nurses' perceptions of the actual and ideal purposes of incident reporting in the hospital. However, identifying staff continuing education needs, revising policy and procedures, and determining medical-legal claims were purposes that differentiated among nurse groups on the remaining variables.

Other positions held as an independent professional variable did not significantly differentiate among nurse groups regarding nurses' perceptions of situations requiring incident reporting. The situation on which most nurse groups varied in their perceptions was medication reaction following administration by a physician. Reporing medication errors generally showed significant perceptual differences among the various significant nurse groups.

Guidelines for incident reporting were frequently implemented according to the nurses surveyed. Age, years in position and in area of nursing practice, and professional score were independent personal and professional variables that did not differentiate nurses' perceptions of the frequency by which guidelines were used. Confidentiality, completion of reports within 24 hours, and comprehensive documentation of the incident on the nurses' notes were guidelines affected by the most variables and differentiated among their respective nurse groups.

Nurses' perceptions of the actual and ideal processing of incident reports were significantly differentiated by all independent variables except area of nursing and level of education. The nurse groups' current position differed significantly among more of the processing activities than did any other variable. Area summary reports of incident data and coordination of interdepartmental safety objectives were processing activities that were affected by the greatest number of independent variables.

All personal and professional variables produced significant differences among nurses' perceptions of factors influencing incident reporting. Nurse groups tended to vary significantly in their perceptions that colleagues' opinions and responsibility to the hospital influenced their reporting behaviors. Overall, however, independent variables did not strongly indicate any single or group of factors that affected nurses' reporting behaviors.

Nurses' overall perceptions of incident reporting were significantly differentiated by age, position, and years in position, nursing area, and profession. Nurses varied most in their rating of the factors understanding purposes for incident reporting and knowledge of situations regarding completion of incident reports. The findings appeared to show that the more experienced nurses and those remaining longer in the hospital tended to give higher ratings to the factors related to overall perceptions of incident reporting than did those nurses younger and less experienced. Since the former characteristics generally described the nurse-supervisor group and the latter, the staff nurse group, it was concluded that nurse-supervisors had a more idealistic perception of the incident reporting process than did their subordinates. Nurses' perceptions of the actual and ideal purposes and processing of data both in this chapter and in Chapter 4 also tended to lead to similar conclusions.

Chapter 6

Summary, Conclusions, and Implications

This chapter provides a summary of the research and findings related to nurses' perceptions of incident reporting. Conclusions are stated, and some implications for practice and further research are discussed.

Overview of the Research

Background and Purpose

This study examined nurses' perceptions of incident reporting at an urban acute care hospital. Staff nurses and nurse-supervisors working in medical, surgical, and intensive care areas in the hospital were surveyed. Data were collected by questionnaires regarding nurses' perceptions of the purposes, situations, guidelines, processing, influencing factors, and their overall perceptions of incident reporting. Interviews were conducted with nurse-administrators regarding their descriptions of the process of incident reporting at the hospital.

Recent attention to quality assurance in health care has been attributed to current trends in health care costs, technological advancement, unionism, and legal, accreditation, and aspiring professional standards. Despite judicial and regulatory requirements surrounding quality assurance, the C.C.H.A.'s mandate requiring hospital boards to implement programs to assess and correct deficiencies in hospital operations could have the greatest impact on quality assurance in hospitals. One essential element in the remedial activities of hospital administration is a risk management program, the cornerstone of which is the incident reporting policy and its implementation.

This study was designed to determine staff nurses' and nurse-supervisors' perceptions of the actual and ideal purposes of incident reporting, situations requiring incident reporting, frequency of compliance with incident reporting guidelines, actual and ideal processing of incident report data, and the overall nature of incident reporting at the hospital and in the specific areas investigated.

The following sub-problems were addressed:

1. What is the organization and nature of incident reporting in the hospital?
2. What are nurses' perceptions regarding the actual and ideal purposes of incident reporting?
3. What are nurses' perceptions regarding situations requiring completion of an incident report?
4. What are nurses' perceptions of the frequency with which guidelines for incident reporting are practised?
5. What are nurses' perceptions regarding actual and ideal incident report processing?
6. What are nurses' perceptions of factors influencing incident reporting?
7. What are nurses' overall perceptions of incident reporting?
8. What are the significant personal and professional variables influencing nurses' perceptions of the actual and ideal purposes of incident reporting?

9. What are the significant personal and professional variables influencing nurses' perceptions regarding situations requiring completion of an incident report?

10. What are the significant personal and professional variables influencing nurses' perceptions of the frequency with which guidelines for incident reporting are practised?

11. What are the significant personal and professional variables influencing nurses' perceptions regarding actual and ideal incident report processing?

12. What are the significant personal and professional variables influencing nurses' perceptions of factors influencing incident reporting?

13. What are the significant personal and professional variables influencing nurses' overall perceptions of incident reporting?

Methodology

Questionnaire. A questionnaire based on the literature review and suggestions from a panel of experts was used to measure the perceptions of staff nurses and nurse-supervisors. The questionnaire was divided into nine sections. Sections I and II surveyed personal and professional data related to the nurse groups. The remaining sections of the questionnaire were designed to ascertain the nurses' perceptions of the actual and ideal purposes of incident reporting; the situations requiring incident reporting; the frequency guidelines for completing incident reports were followed by nurses in their area or in the hospital; actual and ideal processing of incident report data; the factors influencing their own and/or others' decisions to complete an incident report; and finally, their overall perceptions of incident reporting in their respective areas and/or in the hospital. Additional space was provided for comments regarding incident reporting in the hospital. The questionnaire was piloted in two surgical gynecology units in another hospital. Both staff nurses and nurse-supervisors participated. Adjustments were made in the wording of instructions and items to enhance the reliability of responses.

Interview. Interviews were conducted with the Director of Nursing and Quality Assurance Coordinator to obtain descriptive data regarding the organization and nature of incident reporting from the nurse-administrators' perspectives. The data were also used as a basis for discussion of findings.

Sample. Full-time, registered staff nurses and nurse-supervisors in medical, surgical, and intensive care areas in an active treatment, urban hospital were randomly selected for the study. A total of 213 questionnaires were distributed, and 158 or 74 percent were returned. Anonymity and confidentiality were assured by having participants return the questionnaires in unmarked envelopes to a central nursing office.

Data analysis. Programs in the Statistical Package for the Social Sciences (Nie et al.,1975) were used for data analyses to provide frequency distributions, means, t-test analysis, analysis of variance and Scheffé procedure, and Chi Square analysis. Since the questionnaire was developed by the researcher, only face, content, and construct validity were assured to some degree, but concurrent and predictive validity were not addressed.

Summary of Findings

Demographic Data

The analyses of demographic data provided the basis for the following summary of findings.

1. Staff nurses differed significantly from nurse-supervisors with respect to age, overall nursing experience, level of education, and "professional" score. Nurse-supervisors were significantly older, had significantly greater work experience both in years and positions held, and had a significantly higher level of education. Significantly more nurse-supervisors were currently pursuing a nursing degree, regularly reading nursing journals, holding membership in professional groups, and participating in nursing research. Nurse-supervisors attended inservice education sessions more often than did staff nurses. Approximately twelve percent of the staff nurses had not attended any inservice in the past year. Nurse-supervisors' overall professional score was higher than that of staff nurses.

2. Of all the nurses surveyed, only one staff nurse reported having had no experience completing an incident report either as a student nurse or as a staff nurse. This situational variable was therefore deleted in later analyses.

3. Nurses perceived a variety of patient care delivery systems in operation in the areas surveyed. Nurses from the

same area perceived their current patient care delivery systems differently. This situational variable was also deleted in later analyses.

Interview Data

The following findings were related to the interviews conducted with the Quality Assurance Coordinator and the Director of Nursing regarding the organization and nature of the incident reporting process in the hospital studied.

Sub-Problem 1. What is the organization and nature of incident reporting in the hospital?

1. The nursing administration was planning to review incident reporting guidelines and revise the incident report form. These activities were consequences of accreditation standards related to quality assurance and re-evaluation of administrative need for incident reporting. The incident report was generally perceived as an administrative tool to be used primarily for inter-departmental communication and remediation of incidents. The legalities surrounding the incident reporting system had also been re-assessed. The purposes of the report and its effectiveness in meeting these purposes were being clarified.

2. Although incident reporting policy structures and processes were included in the general orientation of new employees, deficiencies were perceived in compliant incident reporting behaviors at all levels of the organization generally, and the area level specifically.

3. The structures and processes supporting the incident

reporting policy appeared to satisfy the hospital's current risk management needs. There was no core multidisciplinary committee which had as its only mandate regularly to analyze, review, and investigate incident reporting information and to recommend system revisions. Such activities were decentralized generally to nurse-supervisors and/or department heads. A quality assurance nursing committee also was to review incident report summaries for trends in incidents. Through these structures incident report information was perceived as regularly reviewed and acted upon.

4. Reporting was admittedly not as consistent or as uniform as desired by nursing administration though what nurses reported as incidents was considered desirable and necessary to risk management in the hospital. Nurse-administrators perceived a certain reluctance among some nurses to report incidents because of the ineffective and inappropriate use of reports by staff nurses and nurse-supervisors. Efforts to improve the system would focus on encouraging nurses to continue to report as they had and to make the structural changes in policy, procedures, guidelines, and format that would facilitate an improved incident reporting system.

5. The incident reporting system was not included in the quality monitoring system, but incident report processing was part of the quality assurance program. The scope of the Quality Assurance Coordinator's

responsibilities included monitoring the completeness of incident report forms, disseminating incident reports to appropriate department heads for information, and monitoring the statistical summaries of incident reports. The Coordinator was not regularly consulted regarding education, investigation, and recommendations related to the findings from incident report data.

6. The Director expressed general satisfaction with risk management activities surrounding education, investigation, and recommendation based on incident report information. The Director also expressed the opinion that there was a definitive need for staff nurses to assume greater accountability for reporting incidents and for greater initiative in remediating potential risk situations.

7. The Coordinator delineated aspects of the current incident reporting process which required restructuring. Improved clarity in the policy that designated what comprised an incident and what situations should be reported were needed. The form was not used appropriately at times by nurses, supervisors, and physicians. It was conceded that some nurses resented and/or feared incident reports. Information recorded on the current report form was at times difficult to analyze, incomplete, and not comprehensive. As a staff position the Coordinator lacked sufficient authority to participate directly in unit-based and hospital-wide risk management. Incident report data were not comprehensively inter-related with quality assurance data.

Nurses' Perceptions

The following are the findings related to nurses' perceptions of purposes, situations, guidelines, processing, and influencing factors related to incident reporting. Each category is discussed according to the specific sub-problems.

Sub-Problem 2. What are nurses' perceptions regarding the actual and ideal purposes of incident reporting?

Nurses perceived a variety of purposes for incident reporting. They tended to agree with the purposes for incident reporting that were listed in the questionnaire. They tended to be uncertain regarding nursing administration's purposes for incident reporting. Nurses perceived significant differences between the actual and ideal purposes for all those listed except the purpose related to performance evaluation which the majority of nurses disagreed was an actual or ideal purpose. The greatest discrepancy between actual and ideal purposes for incident reporting was related to developing education programs based on incident report information. The least discrepancy existed in the use of incident reports in performance evaluation.

Sub-Problem 3. What are nurses' perceptions regarding situations requiring completion of an incident report?

Nurses were broadly selective regarding their perceptions of situations requiring completion of an incident report. All situations listed in the questionnaire would be considered incidents by the literature and/or hospital policy, yet nurses indicated they did not always comply with hospital policy or recommendations in the literature. Medication errors and injuries were generally well reported by the nurses surveyed. Deficiencies in the operation of hospital systems were not perceived as incidents that should be recorded on an incident report.

Sub-Problem 4. What are nurses' perceptions of the frequency with which guidelines for incident reporting are practised?

Half of the nurses surveyed perceived comments on incident reports as frequently and always not being judgmental. Although nurses tended to disagree that incident reports were used as evaluation tools, some nurses may have perceived themselves as being evaluated informally by physicians, superiors, peers, and patients. The fact that nurses tended to act upon the supervisor's opinion might have exposed them to some informal evaluation process.

The guidelines the greatest majority of nurses always followed were documenting accurate descriptions of the incident on the report and ensuring appropriate signatures and notations appeared as required on the report. Nurses were divided between reports rarely and always having remedial plans outlined, and being reviewed by the supervisor. Nurses perceived the existence of a report being recorded in the nurses' notes frequently and always despite this practice being contrary to hospital policy. Half of the nurses reported that they would document the existence of the incident report in the nurses' notes. Nurses also perceived a variety in the frequency with which confidentiality was maintained in completing reports.

When nurses completed incident reports, guidelines were frequently followed. The fact that they were not always followed may be a reflection of poor understanding of the purposes of incident reporting and/or clarity of the guidelines. The fact that nurses recorded the existence of an incident report in the nurses' notes implies a lack of awareness of hospital policy. The content of orientation to incident reporting policy and method of instruction to new employees may need to be re-examined. Nurses tended to perceive a judgmental component in incident reports, indicating that some nurses take risks in completing a form. This may also explain the inconsistencies in following guidelines. When incidents were discussed in an area, the approach may have varied between that of a reprimand or that of constructive problem-solving.

Sub-Problem 5. What are nurses' perceptions of actual and ideal incident report processing?

Less than 25 percent of the nurses surveyed perceived the processing surrounding incident report information as actually occurring in their area or in the hospital. Some nurses perceived the processing activities listed as never occurring. The majority of nurses did not keep personal records of incident reports they completed. The majority of nurses tended to be uncertain regarding processing activities surrounding keeping statistical records, evaluating safety, coordinating interdepartmental objectives for safety, identifying inservice needs, evaluating accreditation criteria, auditing for quality assurance, storing of reports, and assessing insurance premiums.

Nurses perceived significant differences between actual and ideal processing activities except for storing reports in medical records and using incident reports to assess insurance premiums. The greatest discrepancy between actual and ideal processing for incident reports was keeping of personal anecdotal records of incident reports completed. The least discrepancy between actual and ideal processing of incident reports was the use of incident reporting information to assess hospital insurance premiums.

Sub-Problem 6. What are nurses' perceptions of factors influencing incident reporting?

Nurses perceived responsibility to the patient and profession as most influential in their reporting practices. Nurses also tended to perceive the supervisor and policy as influential to their decision to complete a report. The physician was as important a factor as colleagues in nurses' decisions to complete a report. As well, many nurses considered the seriousness of the incident, the purpose and use of the incident report, the situation, legal implications, ability to express an opinion, and time as important to their decision to complete a report.

Although nurses did not perceive ignorance of the legalities of incident reporting as influencing their decision to complete a report, anticipation of potential litigation increased their inclination to complete a report. Although fifty percent or more nurses stated that reports should be completed when unusual situations occurred, when policy or procedure were transgressed, and regardless of opinion, their responses to situations, guidelines, and processing indicated nurses did not always practice their stated professional moral-ethical beliefs.

Sub-Problem 7. What are nurses' overall perceptions of incident reporting?

More than half of the nurses surveyed rated their understanding of the purposes of incident reporting and of situations requiring incident reporting as average to extremely poor. Although the majority of nurses rated their own compliance with policy as high, they rated their satisfaction with current policy and guidelines as average to extremely low. While slightly less than half of the nurses perceived incident reporting as highly important to patient safety, the majority perceived reporting as having minimal impact on improving the quality of patient care and nursing practice.

Sub-Problem 8. What are the significant personal and professional variables influencing nurses' perceptions of the actual and ideal purposes of incident reporting?

Age, position, area of nursing practice, years in profession, other positions held, and level of education revealed significant differences among the nurse groups regarding the purposes of incident reporting. Nurses tended to perceive differently the following purposes: identifying staff inservice needs, identifying unsafe patient environments, promoting nurse compliance with policy and procedures, reporting medical-legal claims, reporting unusual occurrences, revising policy and procedures, assessing insurance premiums, and providing evidence in lawsuits.

Sub-Problem 9. What are the significant personal and professional variables influencing nurses' perceptions of situations requiring completion of an incident report?

Age, position, area of nursing practice, years in profession, and level of education revealed significant differences among groups regarding situations requiring incident reporting. The findings indicated that differences existed between nurse-supervisors and staff nurses regarding the definition of an unusual occurrence in the practice setting. The variables which created these differences were medication errors, physician errors, loss of property, burns, staff injury, patient dissatisfaction, equipment malfunction, charge responsibility, under staffing, defects in sterile packaging, and late stat laboratory reports. Although nurses tended to agree that they should report all unusual situations, their practices did not indicate they always adhered to their stated moral-ethical beliefs. In actual practice conflict may have resulted when nurses attempted to reconcile organizational authority with professional authority.

Sub-Problem 10. What are the significant personal and professional variables influencing nurses' perceptions of the frequency with which guidelines for incident reporting are practised?

Position, area of nursing practice, and level of education revealed significant differences among groups regarding guidelines. Generally, nurse-supervisors who were older and had a higher level of education perceived guidelines as being used less frequently than did staff nurses. Areas tended to use guidelines at different frequencies and expressed different levels of expectations regarding frequency of use of the guidelines. The guidelines that significantly differentiated the perceptions of most nurse groups were related to the pertinent and accurate documentation of the incident on the report, and on the nurses' notes.

Sub-Problem 11. What are significant personal and professional variables influencing nurses' perceptions of actual and ideal incident report processing?

Age, position, years in profession, previous positions held, and professional score revealed significant differences regarding nurses' perceptions of actual and ideal incident report processing. Items creating these differences were discussing summary reports at area meetings, coordinating interdepartmental safety objectives, receiving regular summary reports in the area, evaluating patient safety, reviewing of statistical data by the supervisor, identifying inservice needs, and storing incident reports in medical records for a specified period of time.

Sub-Problem 12. What are the significant personal and professional variables influencing nurses' perceptions of factors influencing incident reporting?

Age, position, area of nursing practice, years in current position, years in area of nursing practice, other positions held, years in profession, professional score, and level of education revealed significant differences among groups regarding factors influencing incident reporting. Nurses tended to differ on the following factors: opinion of colleagues and supervisor, responsibility to hospital, profession, and patient's family; hospital policy, documentation and use of information, workload, practicality of policy, fear of evaluation, signature on the report, expression of an opinion and completion of the report. Both nurse groups tended to be motivated by a variety of factors to complete a report. While nurse-supervisors tended to be more organizationally orientated in their decisions regarding the situations to be reported than were staff nurses, their actions appeared to be influenced to a greater degree by professional moral-ethical values than were staff nurses.

Sub-Problem 13. What personal and professional variables influence nurses' overall perceptions of incident reporting?

Age, position, and years in position, area of nursing practice, and professional score revealed significant differences among nurses' overall perceptions of incident reporting. The items related to these significant differences included: understanding purposes of incident reporting, knowing situations requiring reporting, complying with policy, promoting quality assurance, improving nursing practice, and satisfaction with guidelines and policy. Nurse-supervisors tended to rate the effectiveness of the system at a higher level than did staff nurses.

Conclusions

The following conclusions are derived from the findings related to the organization and nature of incident reporting in the hospital studied, the demographic data and the nurses' perceptions of incident reporting.

1. Nursing administration perceived a need to revise the structures related to incident reporting in the hospital. The process of incident reporting did not appear to be an immediate concern. Although it was conceded that the system did not meet the ideal risk management criteria, the system as it currently operated satisfactorily met the hospital's legal, quality assurance, and cost-related needs.

2. Incident reporting was loosely integrated with the quality assurance program. The appointment of the Coordinator to review incident reports and to identify trends was an initial step towards consolidating the two structures. Despite the coordinated appearance of the

conceptualized incident reporting system in the hospital, the description of its operation suggested a potential for fragmented incident reporting activities. The Coordinator's role as risk manager was not clearly differentiated from that of the ADN, US, and staff nurse. Without clearly defined roles, risk management would be exposed to errors, omissions, and general inefficiencies.

3. The Director and Coordinator differed in their overall perceptions of the system's effectiveness. The Director was more positive and confident about the system's effectiveness in meeting safety objectives for the hospital than was the Coordinator and the nurses in the survey.

4. Staff nurses in the sample had limited personal, professional, and educational experiences upon which they could base decisions regarding their practice. Research has shown that baccalaureate or higher educated nurses have better problem-solving abilities and risk-taking propensity, and higher moral-ethical development than do diploma educated nurses. Diploma nurses educated in hospital-based nursing programs were more likely to have stronger bureaucratic than professional loyalties. Although this study did not determine if diploma nurses obtained their education through hospital-based or college programs, diploma nurses in both college and hospital-based programs may not be socialized as thoroughly to professional ideals as are nurses in university programs because they receive their education in half of the time. University and college educated nurses may also spend less time in the hospital

setting than those in hospital nursing education programs.

5. Nurse-supervisors in the sample surveyed had extensive personal and professional nursing experience. They had also been employed by the hospital for an extended period of time. As a group, they had average professional characteristics though they were "more professional" than staff nurses. Bureaucratic loyalty seemed to be stronger since their professional development was largely a result of the support they received from the hospital. Having both more experience and authority, nurse-supervisors could be important resources for younger, less experienced nurses regarding policy and practice behaviors related to incident reporting.

6. Nurses perceived a variety of purposes for incident reporting in the hospital, but the actual purposes were perceived as significantly different from the ideal. Nurse-supervisors agreed more strongly with the purposes both actually and ideally than did staff nurses, indicating that discrepancies existed between the two groups' expectations for incident reporting. Staff nurses were generally uncertain regarding the administrative purposes for incident reporting. This finding suggests that hierarchical relationships may have interferred with collegial sharing of incident report data among the various levels of the nursing department. Understanding the purposes for incident reporting was an influential factor in the frequency of nurses' reporting behaviors.

7. Nurses varied significantly regarding the situations they would or would not report. Most nurses' responses indicated that their decisions not to report conflicted with hospital policy. Clarity in policy and guidelines for reporting may have created this discrepancy. Different expectations among nurse-supervisors as to what staff nurses should report on incident forms may also have contributed to these differences since nurses indicated that they often sought their supervisor's input. Although nurses indicated that policy and not personal opinion should enter into the decision to complete an incident report, reporting policies and/or guidelines were not adequately meeting practice needs. As well, nurses apparently did not successfully link quality assurance, legal standards, nor cost factors to the situations they would not report.

8. On the average, guidelines were frequently adhered to in completing reports. Nurse-supervisors tended to perceive the frequency guidelines were used as being less than did staff nurses. If use of guidelines did not meet supervisors' expectations, then purposes for reporting and reporting guidelines were probably inadequately defined. Area of nursing practice tended to differentiate nurses regarding use of guidelines, suggesting that nurses differed locally in their perceptions of administration's expectations regarding reporting. If nurses were not adhering to guidelines, the literature suggests that they may believe the supervisor, doctor, or hospital would have

assumed legal responsibility for their errors. This attitude regarding accountability was also reflected in nurses' perceptions that their supervisors should keep anecdotal accounts of reports completed, but that staff nurses need not do the same.

9. The processing of incident report data was perceived by the nurses as being significantly different between the actual and ideal. Although nurses collected the data, there was evidence that problem solving based on report data occurred inconsistently. Staff nurses participated in significantly fewer processing activities than did nurse supervisors. This would reinforce the expectation that staff nurses were not expected to take responsibility for risk management at the area level. As a result of not having had access to information regarding administrative use of report information and having perceived minimal problem-solving resulting from data collected, staff nurses would continue to be suspicious, apathetic, or negative about the need to report unusual occurrences. If nurses do not report unusual occurrences regularly, nor follow guidelines, nor understand purposes, then incident report processing may be ineffective as far as achieving safety-related hospital objectives.

10. Nurses in the sample disagreed or strongly disagreed that incident reports were used in performance evaluation. This finding conflicted with statements by experts on incident reporting in the literature. That staff

nurses often sought supervisors', colleagues', or physicians' opinions on whether to complete a report or not seemed to indicate that nurses could be exposed to some form of informal evaluation process. A large number of nurses expressed the desire to document their own impressions of the incident on the report form. A large number of nurses also indicated that the nurse causing the incident should complete a report. These findings suggest that some anxiety exists for nurses when the need arises to complete a report. Although nurses indicated workload was not a factor in their willingness to complete a report, the majority of nurses' responses indicated that time to complete a report decreased their inclination to initiate reporting. Seriousness of the incident was a strong influencing factor in reporting, particularly when there was a threat of litigation.

11. Nurse-supervisors rated factors contributing to their overall perceptions of incident reporting higher than did staff nurses. Changes in the overall incident reporting system may be slow in implementation because of the differences in the two groups' expectations. Since personal and professional variables did not differentiate strongly among nurses' perceptions of the components of the reporting process, strong support for changes in the system may be minimal.

12. Nurses' stated ethical beliefs regarding their behaviors in incident reporting frequently conflicted with perceptions of factors influening their practices or those of others in their area or in the hospital. Constraints

within the environment existed that required greater indepth assessment than what was provided by this study.

Implications

Nursing Practice

1. If not already undertaken, nursing administration must begin comprehensive short and long-term strategic planning regarding the educational needs of staff nurses and nurse-supervisors with regard to the A.A.R.N.'s Entry to Practice mandate. Comprehensive local continuing education programs could motivate nurses toward acquiring higher levels of education. Programs presently in place should be re-evaluated to determine if they meet nurse's learning needs. Efforts should be undertaken to determine why nurses are not highly motivated towards continuing education.

2. Nurse-administrators should re-evaluate their commitment to the professional development of staff nurses and nurse-supervisors. Development of an environment which encourages and supports professional behaviors will require additional commitments of time, energy, and funds. The decentralization of the patient care delivery system is encouraged as nurses' accountability and responsibility can be fostered more easily in such an organizational structure. Nurse-supervisors should be given assistance in understanding changes in their leadership role and in encouraging leadership skills in their subordinates.

3. The purposes of incident reporting should be operationalized in processing incident report information at

the area level. Area meetings should have as a regular part of their agenda the discussion of incident report data. Standard care plans for high risk patients as part of a risk/falls program (Fife et al., 1984) should be developed. This program would contribute to the development of appropriate and effective remedial plans for those patients involved in unusual incidents.

4. Staff nurses should be encouraged to apply the nursing process to the use of incident report information. The process should be used not only in providing safe patient care, but also in evaluating individual nursing practice. Orientation programs should encourage nurses to maintain anecdotal accounts of their performance, so that they can objectively evaluate and implement self improvement activities. Incident reports can be used in fault analysis as suggested by Duran (1979).

5. Orientation programs should ensure that the philosophy, purpose, and guidelines regarding incident reporting policy are discussed. The rationale behind the reporting of situations identified as "unusual" should be discussed since most nurses have limited experience as to the cost effective and legal ramifications that some situations incur. Guidelines should be reinforced through using examples of written reports in practice situations. The process of routing information and how it is utilized should be related to philosophy, purposes, and guidelines. Since nurses value doctors' opinions regarding when to report, physicians should be given this information as well

as nurses.

6. Since the success of the incident reporting system depends on nurses' willingness to report, staff nurses should be included in developing reporting guidelines. They should be encouraged to evaluate policy and to participate in discussions related to policy revision. As policy implementors, staff nurses could assist nurse-administrators in understanding the realistic and practical needs of policy implementation (Lieberman, 1982).

7. Nurses should be encouraged to use incident reports more often. Both doctors and nurses need to be "sold" on the importance of incident reporting as an integral part of quality patient care and creating a better pratice environment. Nurses should be rewarded for reporting incidents and protected from any punitive outcomes.

8. Nursing administration should support nurse-supervisors in planning time to work with staff nurses to assist them in evaluating patient care, devising strategies to improve the quality of care, evaluating their skills and educational needs, and understanding how their decisions and actions impact on organizational goals related to cost effectiveness, quality assurance, and patient care.

Nursing Administration

1. Nursing adminstration must define clearly the purposes for which they perceive incident reporting exists.

2. An incident reporting policy should include the hospital philosophy and purposes of the policy. What

comprises an unusual occurrence or incident should be clearly defined. The literature suggests that including these statements in the policy whould reinforce at lower organizational levels administration's commitment to risk management, reduce anxiety regarding reporting incidents, reduce the ambiguity surrounding reporting, and promote clarity in expectations regarding incident reporting.

3. In developing the incident form, policy, and guidelines, nursing administration should consider both short-term and long-term utilization of report information. These matters should be clarified before the actual form is approved. In particular, quality assurance standards and risk management objectives should be related to data collection that would promote operational integration of the two elements before the report form is developed. The form should facilitate collection of comprehensive and practical data which could be used in statistical analysis, trends identification, and in relating its significance to other data pools.

4. The Coordinator's role in risk management needs to be clearly defined. In doing so the structures related to incident reporting must be re-evaluated to facilitate the Coordinator's access to and effective analysis of data. The Coordinator should also have unhindered access to ADN, US, clinical nurse-educators, staff nurses, and other departmental personnel in matters related to incident reporting and incident investigation.

5. Terms of reference for the nursing committee on

quality assurance should be reviewed in order that members adopt the mandate of reviewing and evaluating data, and of offering recommendations based on the data in incident report summaries.

6. A core multidisciplinary committee should be established in order to ensure that hospital-wide quality assurance and risk management are closely coordinated and demonstrated in practice. The Coordinator should be a member of this committee. Such a committee could improve the efficiency and thoroughness of incident report review, analysis, and investigation. The broader ramifications of incidents as they impact on the hospital operation would be more effectively monitored for the purpose of timeliness in remediation and in short-term and long-term utilization of report data and summaries.

7. In reviewing the related literature, interview and survey results, the following recommendations are offered for the development of an incident report form:

a. A summary of the hospital mission statement in particular the statements which referred to cost effectiveness, quality assurance, and a safe environment.

b. Statement of the purpose for completing the form.

c. Comprehensive definition of an unusual incident. (The current definition is satisfactory.)

d. A statement of the incident reporting policy or policy number.

e. Guidelines for completing each section of the form should be included on the back of the form.

f. A checklist format that encourages an analytical and problem-solving approach to describing causes for the incident and remedial action surrounding the incident. Questions should encourage evaluation of performance against quality assurance and nursing practice standards. The A.H.A. incident report form is recommended as a guide.

g. Information required by the current form should be retained but adapted to the A.H.A. report form.

h. Confidentiality should be highlighted.

i. Additional space should be provided to allow reporters to enter personal observations regarding the incident.

8. Incident reports should continue to be distributed for information purposes as is the current practice. Adopting the Alberta Hospital Association's incident report form eliminates the need for photocopying reports. Maintaining professional and administrative confidentiality in transmitting information should be guaranteed at all times.

9. Using Leithwood's (1981) curriculum dimensions, an orientation program interrelating incident reporting and quality assurance should be developed. It is important that new employees be introduced to the administration's expectations regarding incident reporting early in the socialization process in order to combat the discrepancies in implementation that occur across the areas.

10. Inservice education programs related to risk management should be developed and presented regularly. The Coordinator, risk management committee members, and quality assurance nursing committee members should recommend topics as well as participate in presentations. Their participation should facilitate a better understanding of incident reporting, administrative expectations for incident

reporting, and its relationship to cost effectiveness and quality assurance.

Research

This study was the first of its kind known to have been conducted. More research in this area is needed either to support or augment the findings.

1. A similar sample of nurses could be studied in other hospital environments in order to improve the face, construct, concurrent, and predictive validity of the instrument used in this study.

2. Using specific criteria for assessment of ideally completed incident reports, a study could be developed that compared reports actually completed to the ideal criteria, and to nurses' perceptions of the completeness of reports they initiated.

3. Other nurse populations could be surveyed regarding factors influencing nurses' incident reporting behaviors in order to substantiate this study's findings.

4. A study with a fucus similar to this research could be conducted using an interview rather than a questionnaire to collect data.

5. Research regarding the impact of incident reporting on quality assurance is necessary in order to establish empirically their relationship.

6. Research relating education programs based on risk management to improved incident reporting practices should be conducted.

References

Abrams, Natalie
1978 "A contrary view of the nurse as patient advocate." Nursing Forum 17 (3) 259-267.

Advanced Education and Manpower.
1975 The Report of the Alberta Task Force On Nursing Education. Edmonton: Alberta, 1975.

Alberta Association of Registered Nurses.
1984 Bylaws. Edmonton.

__________. Nursing Practice Standards.
1980 Edmonton.

Ashley, J.L., S.K. Stephens, and S.B. Pearson
1977 "Elements in sucessful risk reduction programs." Hospital Progress 58 (7) 60-64,75.

Barker, K.N.
1961 "A study of the problem of detecting medication errors in the hospital." Gainsville: University of Florida, Unpublished Master's Thesis.

----------, and W.E. McConnell
1962 "Detecting medication errors in hospitals." American Journal of Hospital Pharmacy 19 (August) 361-369

----------, W.W. Kimbrough, and W.M. Heller
1968 "A study of medication errors in a hospital." Oxford: University of Mississippi.

Barker, Philip H.
1983 "An investigation of incident reporting systems as a risk management tool in acute care hospitals." Edmonton: University of Alberta, Department of Health Services Administration and Community Medicine

Barrett, J., B. Gessner, and C. Phelps
1975 The Head Nurse,3d. New York: Appleton-Century-Crofts.

Batty, Richard G.
1985 "Quality assurance--what lies ahead? A Canadian legal prosective." Health Law in Canada 5 (4) 108-112.

Berman, Paul.
1978 "The study of macro- and micro-implementation of public policy." Public Policy 26 (Spring) 157-184.

Bille, D.A.
1980 "Legal considerations in nursing service." Nursing Administration Quarterly 5 (Fall) 73-82

Blake, P.
1984 "Incident reporting: a complete guide." Nursing Management 15 (November) 37

Borg, W.R. and M.D. Gall
1983 Educational Research: An Introduction, 4d. New York: Longman Inc.

Brink, P.J. and W.J. Wood
1983 Basic Steps in Planning Nursing Research From Question to Proposal. Monterey, California: Wadsworth Health Sciences Division.

Brown, Barbara
1983 "Editorial." Nursing Administration Quarterly 7 (Spring) viii-ix.

Bryant, Y. and A. Korsak
1978 "Who is the risk manager and what does he do?" Hospitals 52 (January 16) 42-43.

Canadian Council on Hospital Accreditation.
1983 Standards for Accreditation of Canadian Health Care Facilities. Ottawa.

Carroll, A.
1967 "The nurse on the witness stand." Nursing Clinics of North America 28 (March) 153-159.

Cook, P. and D. Massie
1984 "Incidents: acuity counts, too." Nursing Management 15 (December) 20.

Corwin, R.
1961 "The professional employee: a study of conflict in nursing roles." American Journal of Sociology 66 (May) 604-615.

----------, and M. Taves
1962 "Some concommitants of bureaucratic and professional conceptions of the nurse role." Nursing Research 11 (Fall) 223-227.

Cournoyer. C.
1985 "Protecting yourself after a patient is injured." Nursing Life 5 (March-April) 20-22.

Creighton, H.
1981 *Law Every Nurse Should Know*, 4d. Philadelphia: W.B. Saunders.

Crisham, P.
1981 "Measuring moral judgments in nursing dilemmas." *Nursing Research* 30 (March-April) 104-110.

Curtin, Leah
1981 "Honesty, incident reports, and risk management." *Nursing Management* 12 (October) 7-8.

Cushing, Maureen
1986 "Staffing: sometimes a no-win situation." *American Journal of Nursing* 86 (April) 389-390.

Donahue, M.
1978 "The nurse--a patient advocate." *Nursing Forum* 17 (2) 143-151.

Driscoll, Joan
1975 "Implementing and enforcing OR policies." *American Operating Room Nurses* 21 (May) 1031-1037.

Dugas, Beverly
1985 "Baccalaureate for entry to practice: a challenge universities must meet." *Canadian Nurse* 81 (May) 17-19.

Duran, Gladys
1979 "Positive use of incident reports." *Hospitals* 53 (July) 60-68.

----------.
1980 "On the scene: risk management." *Nursing Administration Quarterly* 5 (Fall) 19-35.

Dwyer, J.S.
1982 "Hospital incident reports: protected from discovery." *Hospital Progress* 63 (October) 38-39.

Elnicki, R.A. and J.P. Schmidt
1980 "Contribution of patient and hospital characteristics to adverse patient incidents." *Health Services Research* 15 (4) 397-414.

Erickson, B.H. and T.A. Nosenchuk
1977 *Understanding Data*. Toronto: McGraw-Hill Ryerson.

Evans, Helen
1984 "Nursing perspectives on liability." *Health Law in Canada* 4 (4) 90-102.

Fiesta, J.
1983 *The Law and Liability*. New York: John Wiley and Sons.

Fife, D., P. Solomon, and M. Stanton
1984 "A risk/falls program: code orange for success." *Nursing Management* 15 (November) 50-53.

Fifer, W.R.
1979 "Risk management and quality assurance integration for optimal effectiveness." *Quality Review Bulletin* 5 (8) 15-19.

Frey, Mary
1976 "Administration of nursing service--a leading force for the development and implementation of policy." *International Nursing Review* 23 (September-October) 137-140,154.

Georgopoulous, B.
1966 "The hospital system and nursing--some basic problems and issues." *Nursing Forum* 5 (3) 8-35.

Goodman, Terri
1984 "Risk management: why it became necessary." *American Operating Room Nurses* 39 (June) 1256-1260.

Grier, M. and C. Schnitzler
1981 "Nurses propensity to risk." *Nursing Research* 28 (May-June) 186-191.

Gryzbek, Tom
1979 "Employee interest key to successful incident reporting." *Hospitals* 53 (July 16) 97-98.

Hall, Gene E. and Susan F. Loucks
1982 "Bridging the gap: Policy research rooted in practice." In *Policy Making in Education*. ed. Ann Lieberman and Milbrey McLaughlin. *Eighty-first Yearbook of the National Society for the Study of Education*. Chicago: University of Chicago Press 133-158.

Horty, J.
1968 "What incident reports must be kept confidential." *Modern Hospital* 11 (November) 62-64.

Hoy, Wayne K. and Cecil G. Miskel
1978 *Educational Administration: Theory, Research, and Practice*. New York: Random House.

Hubeniak, L.G. and J.A. Alutto
1972 "Factors in Development of organizational commitment." Administrative Science Quarterly 17 (December) 555-573.

Jackson, M. and P. Lynch
1985 "Applying epidemiological structures to risk management and quality assurance activities." Quality Review Bulletin 11 (October) 306-312.

Johnson, N.D.
1971 "The professional-bureaucratic conflict." Journal of Nursing Administration 3 (May) 31-39.

Jones, M. and D. Dodge
1980 "Training model helps staff eliminate risks." Hospitals 54 (January) 40-42.

Joseph, Vincent D. and Stephen K. Jones
1984 "Incident reporting: cornerstone of risk management." Nursing Management 15 (December) 22-23.

Kinlock, K.
1982 "For nurses only. Should nursing administrators use incident reports as a risk management tool?" Canadian Nurse 78 (November) 16.

Ketefian, S.
1981a "Moral reasoning and moral behavior among selected groups of practicing nurses." Nursing Research 30 (May-June) 171-175.

____________.
1981b "Critical thinking, educational preparation, and development of moral judgment." Nursing Research 30 (March-April) 98-103.

Kovach, J.S.
1985 "What is peer consultation in a group context?" Peer Consultation in a Group Context: a Guide for Professional Nurses. ed.Joyce Sheilds. New York: Springer Pub. Co.

Knapp, Rebecca
1978 Basic Statistics for Nurses. New York: John Wiley and Sons.

Lambert, E.C.
1965 "Evaluating the quality of nursing care." Hospitals 39 (November) 61-66.

Langhill, G.
1977 "Incident review through computers." Dimensions in Health Science 54 (June) 36-38.

Lanza, Marilyn
1985 "How nurses react to patient assault." Psychosocial Nursing and Mental Health Services 23 (June) 6,8-10.

LaRocco, Susan
1985 "Patient abuse should be your concern." Journal of Nursing Administration 15 (April) 27-31.

Latessa, P., G. Long, and S. McCracken
1979 "Incident data compiled and compared." Hospitals 53 (November 16) 54-88.

Lieberman, Ann
1982 "Practice makes policy: tensions of school improvement." In Policy Making in Education. ed. Ann Luberman and Milbrey McLaughlin. Eighty-First Yearbook of the National Society for the Study of Education. Chicago: University of Chicago Press: 249-269.

Leithwood, Kenneth A.
1981 "Dimensions of curriculum innovation." Journal of Curriculum Studies 13 (1) 249-269.

Manthey, Marie
1980 The Practice of Primary Nursing. Boston: Blackwell Scientific Pub. Inc.

Mappa, J. and G. Turner
1984 "Quality assurance: a new approach." Dimensions in Health Service 61 (March) 12-14.

Meisenheimer, C.G.
1983 "Incorporating J.C.A.H. standards into a quality assurance program." Nursing Administration Quarterly 7 (Spring) 1-8.

Merryman, Priscilla
1985 "The incident report: if in doubt fill it out." Nursing '85 15 (May) 57-59.

Minister of Health and Welfare.
1970 Task Force Report on Cost of Health Care Service in Canada. vol 3. Ottawa : Queen's Printer.

Monagle, J.F.
1980 "Risk management is linked with quality care." Hospitals 54 (September) 57-59.

Moore, M.
1971 "Philosophy, purpose, objectives--why do we have them?" Journal of Nursing Administration 1 (May-June) 9-14.

Moore, J.A.
1972 "Policies--guidelines for action." Journal of Nursing Administration 2 (May-June) 29-33.

Nordecchia, M.A. and M.T. Meyers
1980 "The policy manual: basis for legal protection." Nursing Administration Quarterly 5 (Fall) 57-62.

Newton, M. and D. Newton
1977 "Guidelines for handling drug errors." Nursing '77 7 (September) 62-68.

Nie, Norman H. et al.
1975 Statistical Package for the Social Sciences, 2d. New York: McGraw-Hill.

Orlikoff, J. and G. Lanham
1981 "Why risk management and quality assurance should be integrated." Hospitals 55 (June 1) 54-55.

Parker, Stanton
1978 "Risk management: many solutions proposed and successes noted." Hospitals 52 (April 11) 156-158.

Penbirth, M.
1979 Help With Legal Aspects of Nursing Practice. Chapel Hill, North Carolina: W.L. Ganong Co.

Philpott, M.
1985 Legal Liability and the Nursing Process. Toronto: W.B. Saunders.

Picard, Ellen
1978 Legal Liability of Doctors and Hospitals in Canada. Toronto: Carswell Co. Ltd.

__________.
1984 Legal Liability of Doctors and Hospitals in Canada. 2d. Toronto: Carswell Legal Publishers.

Pierce, Michael E.
1984 "Reporting and following up on medication errors." Nursing '84 14 (January) 8-9.

Piscaroik, G.
1981 "Facing the violent patient." Nursing '81 11 (September) 61-65.

Polit, Denise F. and Bernadette Hunglar
1985 Essentials of Nursing Research Methods and Application. Philadelphia: J.B. Lippincott.

Porter-O'Grady, T. and S. Finnegan
1984 *Shared Governance for Nursing : A Creative Approach to Professional Accountability*. Rockwell, Md.: Aspens Systems.

Poteet, G.W.
1983 "Risk management and nursing." *Nursing Clinics of North America*. 18 (September) 457-465.

Rabinow, Jean
1982 Patient injury in the hospital: how to protect yourself legally." *Nursing Life* 2 (January-February) 44-48.

Richards III, E.P. and K.C. Rathburn
1983 *Medical Risk Management: Preventative Legal Strategies for Health Care Providers*. London: Aspen Publishers.

Rosenthal, T. and S. Rosenthal
1983 "Managing risks." *Nursing Management* 14 (April) 38-40.

Rowe, Brenda
1981 "The professional bureaucratic conflict and role stress in staff nurses in southern Alberta." University of Calgary. Unpublished Master's Thesis.

Rozovsky, Lorne E.
1979 *Canadian Hospital Law*, 2d. Ottawa: Canadian Hospital Association.

Rozovsky, Lorne and Fay Rozovsky
1983 *The Canadian Law of Patient Records*. Toronto: Butterworths.

__________.
1985 "Five legal pitfalls of quality assurance." *Health Care* 28 (June) 22-24.

Salman, S.L.
1979 "A systems approach can ensure high quality care and low costs." *Hospitals* 53 (March) 79-82.

Seward, Joan
1969 "Professional practice in a bureaucratic structure." *Nursing Outlook*. 17 (December) 58-61.

Simms, L.M., S.A. Price, and N.E. Ervin
1985 *The Professional Practice of Nursing Administration*. New York: John Wiley and Sons.

Sklar, C.
1981a "You and the law: disciplinary action and the nurse." *Canadian Nurse* 77 (May) 56-58.

__________.
1981b "You and the law: the incident report." *Canadian Nurse* 77 (November) 42-43.

Smistek, Erica
1986 "Liability insurance: litigious society sends premiums soaring." *The Edmonton Journal*, 31 March 1986 B5.

Statistics Canada.
1984a *Health Manpower Statistis*. Ottawa.

Statistics Canada.
1984b *Surgical Procedures and Treatments*. Ottawa.

Statutes of Alberta.
1980 *Limitation of Actions Act*. Alberta RSA.

__________.
1980 *Alberta Evidence Act*. Alberta RSA.

Stevens, Barbara
1980 *The Nurse as an Executive*, 2d. Wakefield, Mass.: Nursing Resources Inc.

__________.
1983 *First-Line Patient Care Management*, 2d. Rockville, Md.: Aspen Systems Corporation.

Stewart, K.P.
1979 "Risk management: no task for the timid." *Trustee* 32 (April) 10-12,13.

Stock, Richard
1986 "Risk management: minimizing errors and liability." *Dimensions* 63 (February) 22-23.

Storch, Jan
1982 *Patients' Rights: Ethical and Legal Issues in Health Care and Nursing*. Toronto: McGraw-Hill-Ryerson.

__________.
1983 "What do we hope to achieve with a new act?" *A.A.R.N. Newsletter* 39 (January) 5.

Sudman, S. and M. Bradburn
1983 *Asking Questions: A practical Guide to Questionnaire Design*. San Francisco: Jossey-Bass Publishers.

Swartzbeck, E.M. and W.L. Milligan
1982 "A comparative study of hospital incidents." Nursing Management 13 (1) 39-43.

Tomlinson, H.
1985 "The bureaucratic as hero/heroine/gadfly." Educational Management and Administration 13 (Summer) 124-130.

Treece, E.W. and J.W. Treece, Jr.
1986 Elements of Research in Nursing, 4d. St. Louis: C.V. Mosby Co.

Trendel-Korenchuk, D.M. and K.M. Trendel-Korenchuk
1983 "Legal Forum." Nursing Administration Quarterly 7 (Spring) 75-79.

Van Reenan
1983 "Quality assurance: introduction to termonology and literature." Hospital Trustee 7(November-December) 18-21.

Van Sluyter, C.K.
1979 "Organizing for patient safety and liability control." Quarterly Review Bulletin 5 (April) 21-24.

Viles, S.M.
1980 "Liability for the negligence of hospitals nursing personnel." Nursing Administration Quarterly 5 (Fall) 88-93.

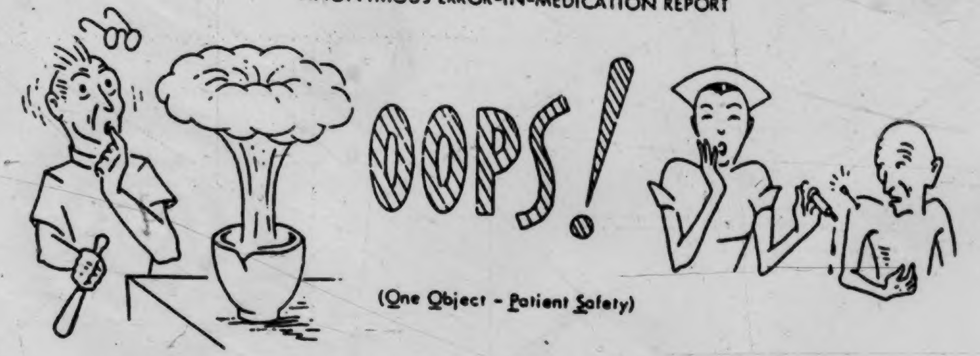
Wasuita, Vera
1982 "Reporting incidents: how many is too many?" Health Services 59 (september) 16-18.

Winer, B.J.
1971 Statistical Principles in Experimental Design 2d. New York: McGraw Hill Co.

APPENDIX A

The "Oops" Report

ANONYMOUS ERROR-IN-MEDICATION REPORT



(One Object - Patient Safety)

~~Date of Occurrence:~~ ____________________ Area Involved: ____________________

NARRATIVE: Please give a complete story of the situation or occurrence. One easy way to include all the important facts in your report is to make sure you have answered the following questions.

1. What happened
2. Where
3. Why
4. How it might be prevented or corrected.

Use both sides of sheet if necessary and place in envelopes provided. No stamp, signature, or approval required.

APPENDIX B

Questionnaire

Office Use

1

1 - - 4

NURSES' PERCEPTIONS OF INCIDENT REPORTING

Please READ all instructions carefully. Circle the number(s) of the MOST appropriate response(s) for each item or fill in the blank as required.

I. Personal and Professional Data:

1. Age to nearest birthday:

    1. 25 and under
    2. 26 to 30
    3. 31 to 35 5
    4. 36 to 40
    5. 41 and over

2. Current position:

    1. Staff Nurse
    2. Unit Supervisor 6
    3. Assistant Director of Nursing

3. Current area of nursing practice:

    1. General Medicine
    2. General Surgery 7
    3. Intensive Care Unit
    4. Other(please specify)______________________________.

4. Number of years worked in current position:

    1. Less than 1
    2. 1 to 3
    3. 4 to 6 8
    4. 7 to 9
    5. 10 to 12
    6. Over 12

5. Number of years worked in current nursing area:

    1. Less than 1
    2. 1 to 3
    3. 4 to 6
    4. 7 to 9 9
    5. 10 to 12
    6. Over 12

Office Us

6. Total number of years WORKED in the nursing profession:

1. Less than 1
2. 1 to 3
3. 4 to 6
4. 7 to 9 10
5. 10 to 12
6. Over 12

7. Nursing positions held OTHER than current position: (More than one response may be circled.)

1. Staff Nurse 11
2. Head Nurse 12
3. Nursing Supervisor 13
4. Nurse Educator 14
5. Other(please specify)______________________________. 15

8. HIGHEST level of education:

1. RN Diploma
2. Baccalaureate Degree in Nursing
3. Masters Degree in Nursing 16
4. Other Degrees/Diplomas held (Please specify)____.

9. Are you presently working towards a nursing degree?

1. Yes 17
2. No

10. Have you attended an inservice session, other than orientation procedures, within the last year?

1. Yes 18
2. No

11. If response to #10 is "yes," how many times/year have you attended workshops/conferences/seminars, etc.?

_____times/year 19

12. Do you read nursing journals, other than Canadian Nurse, on a regular basis?

1. Yes 20
2. No

Office Use

13. Do you belong to any special interest groups/ committees related to nursing?

    1. Yes 21
    2. No

14. Have you been involved in any nursing research during the past year?

    1. Yes 22
    2. No

II. SITUATIONAL DATA

1. Type of patient care delivery system in your area. (More than one response may be circled).

    1. Team Nursing 23
    2. Case Method 24
    3. Primary Nursing 25

2. Have you completed an incident report either asa staff nurse or as a student nurse?

    1. Yes 26
    2. No

It is NOT necessary for you to have completed an incident report to respond to the items in the following sections.

III. PERCEPTIONS OF PURPOSES OF INCIDENT REPORTING

The following statements identify the actual and ideal purposes for which incident reports have been used by nurses and hospital administration. Circle the numbers which correspond to your perception of what the ACTUAL and IDEAL purposes of incident reporting are in your area and/or in the hospital.

Sometimes responses to both situations will be the same, other times they may be quite different. Consider each statement carefully, then respond to the BEST of your ability. There are no right or wrong answers.

KEY: 1 - Strongly Disagree (SD)
2 - Disagree (D)
3 - Uncertain (U)
4 - Agree (A)
5 - Strongly Agree (SA)

Example Item

		SD	D	U	A	SA
Incident reports are records that all hospitals use.	ACTUAL	1	2	3	4	5
	IDEAL	1	2	3	4	5

Using the key provided, the first number circled in the column to the right indicates that the respondent is uncertain that in ACTUAL practice all hospitals use incident reports. The second number circled indicates that the respondent agrees that hospitals IDEALLY should have incident reports as part of their record system.

The purposes of incident reporting are to:		SD	D	U	A	SA	Office Use
1. Identify unsafe patient care environments.	ACTUAL	1	2	3	4	5	27
	IDEAL	1	2	3	4	5	28
2. Motivate nurses to ensure patient safety.	ACTUAL	1	2	3	4	5	29
	IDEAL	1	2	3	4	5	30
3. Identify inservice needs for nursing staff.	ACTUAL	1	2	3	4	5	31
	IDEAL	1	2	3	4	5	32
4. Motivate nurses toward responsible nursing practice.	ACTUAL	1	2	3	4	5	33
	IDEAL	1	2	3	4	5	34
5. Identify unsafe individual nursing practices.	ACTUAL	1	2	3	4	5	35
	IDEAL	1	2	3	4	5	36

		SD	D	U	A	SA	Office Us
6. Measure nurses' compliance with policy and procedures.	ACTUAL	1	2	3	4	5	37
	IDEAL	1	2	3	4	5	38
7. Identify an unusual occurrence that may require investigation.	ACTUAL	1	2	3	4	5	39
	IDEAL	1	2	3	4	5	40
8. Provide a measure for performance evaluation of individual nurses.	ACTUAL	1	2	3	4	5	41
	IDEAL	1	2	3	4	5	42
9. Identify policy and procedures which may require revision.	ACTUAL	1	2	3	4	5	43
	IDEAL	1	2	3	4	5	44
10. Provide a statistical base for identifying trends in incidents.	ACTUAL	1	2	3	4	5	45
	IDEAL	1	2	3	4	5	46
11. Provide a mechanism for monitoring quality assurance within the hospital.	ACTUAL	1	2	3	4	5	47
	IDEAL	1	2	3	4	5	48
12. Provide a mechanism for assessing the hospital's insurance premiums.	ACTUAL	1	2	3	4	5	49
	IDEAL	1	2	3	4	5	50
13. Report potential medical-legal claims to the hospital attorney.	ACTUAL	1	2	3	4	5	51
	IDEAL	1	2	3	4	5	52
14. Provide evidence in event of lawsuits.	ACTUAL	1	2	3	4	5	53
	IDEAL	1	2	3	4	5	54

IV. PERCEPTIONS OF SITUATIONS REQUIRING INCIDENT REPORTING

This section lists situations that may occur in most nursing areas. Circle (1) to indicate NO, you would not initiate an incident report in that situation; circle (2) to indicate YES, you would initiate an incident report in that situation; circle (3) UNCERTAIN, to indicate you would consider other factors before initiating an incident report in that situation. Some situations may not be applicable to your area. In those situations use your BEST judgment as to which one of the three responses would be MOST appropriate if you were in that situation. Please respond to each alternative in every item.

KEY: 1 - No (N)
2 - Yes (Y)
3 - Uncertain (U)

Office Use

2

_1_ - - - _4_

I would complete an incident report if:

	N	Y	U	
1. I made a medication error in which I:				
1. Missed a dose.	1	2	3	5
2. Gave a wrong dose.	1	2	3	6
3. Gave a medication an hour late.	1	2	3	7
4. Gave a medication on the wrong date.	1	2	3	8
5. Gave a medication at the wrong rate.	1	2	3	9
6. Gave a medication to the wrong patient.	1	2	3	10
7. Gave a medication by the wrong route.	1	2	3	11
8. Gave a discontinued medication.	1	2	3	12
9. Gave the wrong medication.	1	2	3	13
2. My patient develops a rash after administration of a medication.	1	2	3	14
3. I observe a physician giving an I.V. medication that causes an acute tissue reaction at the infusion site.	1	2	3	15
4. The narcotic count can not be corrected at shift change.	1	2	3	16
5. A confused patient falls several times despite use of side rails and restraints.	1	2	3	17
6. A nurse injures her back while assisting a patient to transfer.	1	2	3	18
7. I observe a visitor fall while on hospital property.	1	2	3	19
8. My patient receives paddle burns during resuscitation.	1	2	3	20

	N	U	Y	Office Use
9. A nurse is struck by an angry patient.	1	2	3	21
10. My patient develops a decubitus ulcer.	1	2	3	22
11. My patient develops an infection.	1	2	3	23
12. A postoperative patient requires additional unexpected emergency surgery.	1	2	3	24
13. A fire is extinguished by nursing staff.	1	2	3	25
14. A patient complains of physical abuse by nursing staff.	1	2	3	26
15. My patient discharges himself from hospital.	1	2	3	27
16. I am placed in charge of a unit with which I am unfamiliar.	1	2	3	28
17. I am unable to acquire extra nurses for an understaffed shift.	1	2	3	29
18. After 24 hours it is determined a patient's Gomco machine is malfunctioning.	1	2	3	30
19. A drain is not secured properly to a patient.	1	2	3	31
20. I discover defects in packaging of sterile patient care supplies.	1	2	3	32
21. My patient is improperly prepared for an X-ray procedure.	1	2	3	33
22. A stat lab report is received late.	1	2	3	34
23. Pages of my patient's chart are misfiled.	1	2	3	35
24. My patient is discharged before all lab specimens have been collected.	1	2	3	36
25. My patient loses personal property during the hospital stay.	1	2	3	37

V. PERCEPTIONS OF GUIDELINES FOR INCIDENT REPORTING

The following guidelines have been suggested for the completion of an incident report. Circle the number which indicates how often you and/or others complete incident reports according to these guidelines in ACTUAL practice in your area.

KEY: 1 - Never (N)
2 - Rarely (R)
3 - Frequently (F)
4 - Always (A)
5 - Uncertain (U)

	When an incident report is completed by myself or another nurse in my area:	N	R	F	A	U	Office Use
1.	An accurate and concise description of the incident is documented.	1	2	3	4	5	38
2.	A pertinent patient assessment is documented.	1	2	3	4	5	39
3.	Notations and signatures by required persons are made.	1	2	3	4	5	40
4.	Notations regarding the incident are nonjudgmental.	1	2	3	4	5	41
5.	A concise specific plan for corrective action is outlined and steps already taken are documented.	1	2	3	4	5	42
6.	My immediate nursing supervisor reviews the plan with the individuals involved.	1	2	3	4	5	43
7.	All sections of the report are completed within 24 hours.	1	2	3	4	5	44
8.	A concise description of the incident and patient assessment is documented in the nurses' notes.	1	2	3	4	5	45
9.	Notation, "Incident report completed," is documented in nurses' notes.	1	2	3	4	5	46
10.	Confidentiality is maintained as the report is routed through appropriate personnel.	1	2	3	4	5	47

VI. PERCEPTIONS OF THE PROCESSING OF INCIDENT REPORTS

The following are ways in which information arising from incident reports can be processed in your area and throughout the hospital. Circle the number which indicates your perception of how often the following practices in processing incident reports ACTUALLY occur in your area and/or in the hospital. Also circle the number which indicates how often you perceive these practices should IDEALLY occur.

KEY: 1 - Never (N)
2 - Rarely (R)
3 - Frequently (F)
4 - Always (A)
5 - Uncertain (U)

		N	R	F	A	U	Office Us
1. My nursing area receives regular reports summarizing unusual incidents that have occurred in the area.	ACTUAL	1	2	3	4	5	48
	IDEAL	1	2	3	4	5	49
2. At area meetings we discuss ways in which the safety of patient care can be improved based on incidents reported.	ACTUAL	1	2	3	4	5	50
	IDEAL	1	2	3	4	5	51
3. My immediate supervisor keeps statistical data and anecdotal records of incident reports initiated.	ACTUAL	1	2	3	4	5	52
	IDEAL	1	2	3	4	5	53
4. I keep a personal record of incident reports I complete.	ACTUAL	1	2	3	4	5	54
	IDEAL	1	2	3	4	5	55
5. Incident reports are used by nursing administration to evaluate patient/staff/visitor safety.	ACTUAL	1	2	3	4	5	56
	IDEAL	1	2	3	4	5	57
6. Administrators use completed reports as a basis for revising incident reporting policies.	ACTUAL	1	2	3	4	5	58
	IDEAL	1	2	3	4	5	59

		N	R	F	A	U	Office Use
7. Incident reports are used inter-departmentally to coordinate overall objectives for ensuring patient/staff/visitor safety.	ACTUAL	1	2	3	4	5	60
	IDEAL	1	2	3	4	5	61
8. The hospital's inservice department identifies edcation needs based on information from incident reporting.	ACTUAL	1	2	3	4	5	62
	IDEAL	1	2	3	4	5	63
9. The incident reporting system is part of the hospital's accreditation evaluation of its quality assurance program.	ACTUAL	1	2	3	4	5	64
	IDEAL	1	2	3	4	5	65
10. Incident reports are used in the quality assurance audit of nursing areas.	ACTUAL	1	2	3	4	5	66
	IDEAL	1	2	3	4	5	67
11. Incident reports are kept for a specified period of time in medical records.	ACTUAL	1	2	3	4	5	68
	IDEAL	1	2	3	4	5	69
12. Incident reports are used to assess hospital insurance premiums.	ACTUAL	1	2	3	4	5	70
	IDEAL	1	2	3	4	5	71

VII. PERCEPTIONS OF FACTORS THAT INFLUENCE INCIDENT REPORTING

The following are actual or potential factors which may influence your decision to initiate an incident report following an unusual occurence in your area. Circle the number which indicates how strongly you AGREE or DISAGREE that the factor is or would be influential in your final decision to complete the incident report. Please respond to each alternative in every item.

KEY: 1 - Strongly Disagree (SD)
2 - Disagree (D)
3 - Agree (A)
4 - Strongly Agree (SA)

	SD	D	A	SA	Office Us
					3
1. My decision to complete an incident report is influenced by the OPINION of:					_ _ _ _ 1 4
1. My nursing colleagues.	1	2	3	4	5
2. My immediate nursing supervisor.	1	2	3	4	6
3. The attending physician.	1	2	3	4	7
4. Hospital policy.	1	2	3	4	8
2. My decision to complete an incident report is influenced by the RESPONSIBILITY I feel toward:					
1. The hospital.	1	2	3	4	9
2. The attending physician.	1	2	3	4	10
3. The nursing profession.	1	2	3	4	11
4. My immediate nursing supervisor.	1	2	3	4	12
5. My patient.	1	2	3	4	13
6. My patient's significant others.	1	2	3	4	14
3. My decision to complete an incident report is influenced by the SERIOUSNESS of the incident.	1	2	3	4	15
4. I am LESS INCLINED to complete an incident report if I am:					
1. Unaware of the purpose for completing the incident report.	1	2	3	4	16
2. Unaware that policy requires an incident report in this situation.	1	2	3	4	17
3. Uncertain how to document the incident correctly on the incident report.	1	2	3	4	18
4. Uninformed regarding the legal implications of the incident.	1	2	3	4	19

		SD	D	A	SA	Office Use
	5. Fearful such action may label me as incompetent by my nursing colleagues.	1	2	3	4	20
	6. Fearful the report will be used in an evaluation of my performance.	1	2	3	4	21
	7. Fearful that I might jeopardize a colleague's reputation.	1	2	3	4	22
	8. Able to use other methods of communication.	1	2	3	4	23
5.	I am LESS INCLINED to complete a report if the incident is unlikely to be observed by:					
	1. The attending physician.	1	2	3	4	24
	2. My immediate nursing supervisor.	1	2	3	4	25
	3. My patient.	1	2	3	4	26
	4. My patient's significant others.	1	2	3	4	27
	5. Other nurses.	1	2	3	4	28
6.	The greater my overall workload the MORE SELECTIVE I am about completing incident reports.	1	2	3	4	29
7.	I am MORE INCLINED to complete an incident report if:					
	1. Policies requiring me to do so are realistic and practical.	1	2	3	4	30
	2. I perceive a potential threat of lawsuit against myself, the doctor, or the hospital.	1	2	3	4	31
	3. I can express my personal opinion or impression of the circumstances surrounding the incident.	1	2	3	4	32
	4. I do not have to sign the incident report.	1	2	3	4	33
	5. I understand how the information on the incident report will be used.	1	2	3	4	34
	6. Minimal time and effort is required to complete the report.	1	2	3	4	35
	7. Minimal time and effort is required to ensure that others complete their part of the report.	1	2	3	4	36

	SD	D	A	SA	Office Use
8. I believe an incident report should be completed by the nurse who:					
1. Is responsible for the unusual incident.	1	2	3	4	37
2. Witnesses the unusual incident.	1	2	3	4	38
3. Discovers the unusual incident.	1	2	3	4	39
9. The nurse who initiates the incident report should be responsible for ensuring its ENTIRE completion.	1	2	3	4	40
10. I believe an incident report should be completed:					
1. Whenever policy or procedure are not followed.	1	2	3	4	41
2. Whenever a situation not covered by policy or procedures occurs.	1	2	3	4	42
3. Whenever required by policy regardless of personal opinion.	1	2	3	4	43

VIII. OVERALL PERCEPTIONS OF INCIDENT REPORTING

Ona 5-point scale, rate your overall perceptions of incident reporting in your area and/or in the hospital in relation to the following statements. Circle the MOST appropriate response.

Office Us

1. My understanding of the purposes of incident reporting is:

Extremely Poor — Exceptionally Good
1 2 3 4 5 — 44

2. The frequency with which I comply with policies requiring the completion of incident reports is:

Extremely Low — Exceptionally High
1 2 3 4 5 — 45

3. My knowledge of specific situations requiring incident reporting is:

Extremely Poor — Exceptionally Good
1 2 3 4 5 — 46

4. My satisfaction with guidelines for incident reporting is:

Extremely Low — Exceptionally High
1 2 3 4 5 — 47

5. The improvement in the quality of patient care resulting from incident reporting is:

Extremely Low — Exceptionally High
1 2 3 4 5 — 48

6. The importance of incident reporting in providing safe patient care is:

Extremely Low — Exceptionally High
1 2 3 4 5 — 49

Office Use

7. The frequency with which information provided by incident reporting is used in improving nursing practice is:

Extremely Low — Exceptionally High
1 2 3 4 5 — 50

8. My satisfaction with current policies related to incident reporting is:

Extremely Low — Exceptionally High
1 2 3 4 5 — 51

9. Please use the remainder of this page for additional comments regarding incident reporting. Thanks!

APPENDIX C

Interview Schedule for Director of Nursing and Quality Assurance Coordinator

Interview Schedule

1. What is the purpose of the policy(po~~li~~cies) on which the current incident reporting system is based?

2. How long has the current system been in place?

3. Briefly describe the incident reporting system as it operates in this hospital. What are the principal components?

4. Describe your role in the incident reporting system in this hospital.

5. From whom do you receive incident reports?

6. What happens to the report once it passes through the system?

7. Describe the ways information provided by incident reports is used.

8. What do you perceive as barriers to incident reporting in this hospital?

9. What do you perceive as facilitators to incident reporting in this hospital?

APPENDIX D

Correspondence Regarding Interview

June 2, 1986

Dear

This letter is to remind you of the interview scheduled for Friday, June 6, at 1500h. The interview is part of a study on Nurses' Perceptions of Incident Reporting I am conducting as part of the research requirement for a Master's Degree in Educational Administration at the University of Alberta.

I have enclosed a draft of the proposed interview schedule which should take between 30 to 45 minutes. The objective of the interview is toacquire background information regarding the incident reporting process as it occurs in the Department of Nursing at the I will be taking notes during our discussion. Following the interview I will submit a general summary of the interview to you for editing and approval. Your identity and the name of the hospital will remain anonymous.

Please feel free to contact me should you have any concerns. I can usually be reached at 436-3669 after 1500h. I look forward to the session and the opportunity to talk with you.

Thank you.

Sincerely,

Darlene Winship

Darlene Winship
Graduate Student

APPENDIX E

Correspondence to Director of Nursing Regarding Permission to Conduct Study

April 1, 19~~86~~

Dear

I am requesting your permission to access a sample of staff nurses, unit supervisors, and assistant directors of nursing on general surgery, general medicine, and ICU areas to conduct a study of Nurses' Perceptions of Incident Reporting. The overall research project is being done in partial fulfillment of the requirements for a Master's Degree in Educational Administration at the University of Alberta, Edmonton.

I have enclosed for your perusal a copy of the research proposal and questionnaire which has been approved by the Department of Educational Administration. I hope to have the study completed by the end of May, 1980.

I would appreciate the opportunity to discuss the proposal with you, and, should you agree to my conducting the study, ~~the~~ approval process required for research projects in the hospital. A pilot study has been conducted to estimate the validity and reliability of the items on the questionnaire.

I may be contacted at 436-3669 anytime after 1400h. I look forward to hearing from you in the near future.

Sincerely,

Darlene Winship
Graduate Student

APPENDIX F

Correspondence to Unit Supervisor/Assistant Director of Nursing Regarding Permission to Conduct Study

April 24, 1986

Dear

I am writing to inform you that I have been given permission by to conduct a study of nurses' perceptions of incident reporting in the general hospital. The study is being conducted as part of the research requirement for a Master's Degree in Educational Administration at the University of Alberta.

I am requesting your support and participation in conducting this study. A questionnaire will be distributed to all assistant directors of nursing, unit supervisors, and full-time staff nurses on medical-surgical nursing areas in the general hospital. Specifically, the purpose of the study is to examine nurses' perceptions of the purposes and process of incident reporting, and factors that influence incident reporting. Because of the limited numbers of assistant directors of nursing and unit supervisors in the sample being studied it is especially important that I receive your support and responses to the questionnaire. A high return rate from all participants in the sample is important to the validity and reliability of the study. Your responses may also assist administration in re-evaluating the incident reporting process in the hospital.

Be assured your responses, nursing area, and hospital will remain anonymous and treated confidentially. Data will be reported in summary form. A summary of the findings will be forwarded to you.

Please advise me of any questions you may have regarding the study or questionnaire. You may contact me at home after 1400h at 436-3669, at the university at 432-4913; or call my advisor, Dr. Abram Konrad, at 432-3651. I would like to distribute the questionnaires Thursday, May 1 and collect the completed forms Friday, May 9. I would appreciate your informing your nursing staff of my study. Also, further anonymity would be assured if your unit clerk would be willing to deliver the completed questionnaires to nursing office.

Thank you for taking time to review my request. I hope you and your nursing staff will find the questionnaire interesting and informative and the findings enlightening.

Sincerely,

Darlene Winship

Darlene Winship
Graduate Student

APPENDIX G

Cover Letter to Respondents Regarding Participation in Study

Hello!

I am writing to request your participation in a study of nurses' perceptions of incident reporting. The study is being conducted as part of the requirements for a Master's Degree in Educational Administration at the University of Alberta.

While working as a staff nurse, head nurse, and nurse-educator, I have had a variety of experiences with incident reporting. I am conducting this survey to determine your experience with incident reporting. Your participation will help clarify the purposes and process of incident reporting and to identify factors that influence it.

The questionnaire is divided into six sections, each dealing with various aspects of incident reporting. In those situations with which you have had no personal experience, use your best judgment in selecting a response. THERE ARE NO RIGHT OR WRONG ANSWERS. It is not necessary for you to have completed an incident report to respond to the items. Please be frank as to what you have done or would have done given your particular situation with the assurance that all responses will be treated confidentially and that data will be reported in summary form. Your responses, nursing area, and hospital will remain anonymous in the data compilation.

The questionnaire will take 30-45 minutes of your time. When you have completed the questionnaire, leave it with your unit clerk, sealed, in the envelope provided. I will collect all returns from nursing office in one week.

I am looking forward to receiveing your responses! Thank you for your cooperation and assistance.

Sincerely,

Darlene Winship

Darlene Winship
Graduate Student

APPENDIX H

Follow-up Correspondence
to Respondents

May 9, 1986

Hello, again!

I recently requested your assistance in completing a questionnaire on Nurses' Perceptions of Incident Reporting. If you have already completed the questionnaire I would like to take this opportunity to express my appreciation for your interest and support. If you have not yet responded, and are willing to participate, I would appreciate your doing so by Friday, May 16. The quality of the research will be enhanced if a greater number of responses are received. I have left additional copies of the questionnaire in Nursing Office in case you have misplaced the original.

Thank you.

Sincerely,

Darlene Winship

Darlene Winship
Graduate Student

May 21, 1986

Dear Unit Supervisor/Staff Nurse,

Two weeks ago I requested that you complete a questionnaire entitled Nurses' Perceptions of Incident Reporting. One week ago, a second request was circulated to all participants. To date completed returns have not been sufficient for a useful and valid data analysis.

The following is a tally of questionnaires returned:

PARTICPANT	SENT	RETURNED	RETURN RATE
ADN	4	4	100%
Unit Supervisor	20	16	80%
Staff Nurse	190	108	57%
General Surgery	42	28	67%
General Medicine	68	46	68%
Specialties	58	18	31%
ICU	32	16	50%

A minimum return rate of 70% from all levels is essential to the validity of my study.

It is hoped that data analysis will guide hospital and nursing administrators in making further improvements to the present system of incident reporting. It will also interest staff nurses who may wish to check their understanding of incident reporting against those of their superiors, peers, and colleagues. Finally, the study will contribute to the assessment of and improvement in the monitoring of the safety of patient care environments and ultimately the quality of patient care.

If you have already returned your completed questionnaire, I thank you for your cooperation in assisting with my study. If you have not yet completed and returned the questionnaire would you please do so by the final deadline of May 29.

Additional copies have been left in nursing office if you have misplaced the original.

Thank you.

Sincerely,

Darlene Winship

Darlene Winship
Graduate Student

APPENDIX I

Incident Reporting Policy

Source:
Management Committee

Effective Date:
17th March 1986

Cancels & Supercedes:
1,014 15 April 1983

Distribution: Master Policy Books/
Nursing Units

Approved by:

PP 39 Nov. 84

POLICIES

ADMINISTRATION

Unusual incident Report - Form PP 181

Form 181 - Unusual Incident Report - shall be used to report the following:

a) an unusual occurrence relating to a patient, e.g. a medication error, an accident or injury, loss of personal property, etc.;

b) an unusual occurrence relating to a hospital employee or student, e.g. loss of personal property (employee accidents - see Personnel Policy # 19,104);

c) an unusual occurrence relating to a hospital visitor;

d) damage to or loss of any hospital property or equipment, accidental or intentional;

e) fire or flood which has occurred.

APPENDIX J

Incident Report Form

FILE CODE ______

UNUSUAL INCIDENT REPORT

(Confidential — not part of Medical Record or Personnel file.)

Instructions: To be used for any unusual occurences including patient or visitor accidents, patient or hazardous equipment incidents involving an employee, losses to patients, employees or visitors, medication errors, fire, damages or any hazardous condition or occurrence which is not consistent with the routine care of the patient or the routine operation of the hospital.

Send to Nursing Office (applies to all departments).

Incident Occurred: TO PATIENT

Diagnosis ______ Safety Measures Present: Yes ☐ No ☐ N/A ☐

Specific Type of Safety Measures ______

Condition Before Incident: Alert ☐ Sedated ☐ Disoriented ☐ Anaesthetized ☐

Other (specify) ______

TO EMPLOYEE OR STUDENT

Name ______ Age ______ Sex ☐

Department ______ Job Title ______

TO VISITOR OR OTHER

Name ______ Age ______ Sex ☐

Home Address ______ Telephone Number ______

Reason for being at hospital ______

Where did incident occur? ______
(e.g. room number, area)

Date of Incident ______ (Day) ______ (Month) ______ (Year) Time ______ Witnessed Yes ☐ No ☐

Name ______

Position ______

Concise objective description of incident:

______

Date Report Sent ______

Person Making Report ______
(Please Print)

PP 181

Signature ______

Revised: April 1981

Title ______

Name of Examining Doctor ______________________________
(Please Print)

Doctor's Immediate Findings and Treatment: ______________________________

______________________________ (Signature)

______________________________ (Attending Physician's Signature)

Report of Unit Supervisor or Designate: Name: ______________________________
(Please Print)

______________________________ ______________________________ (Signature)

Incident Recorded on Nurses Notes: Yes ☐ No ☐

Report of Supervisor, Assistant Director or Department Head:

Name: ______________________________
(Please Print)

______________________________ Name: ______________________________ (Signature)

APPENDIX K

Incident Report Code Sheet

INCIDENT REPORT CODE SHEET

PATIENT ACCIDENT

a - out of bed
b - out of chair
c - out of wheelchair
d - in bathroom
e - when up with crutches

f - when up with walker
g - other
h - on floor

PATIENT INCIDENT

a - striking nurse
b - striking other patient
c - threatening others
d - threatened self-abuse
e - self abuse - drugs, cuts
f - uncooperative
g - other

LOSS

a - money
b - jewellry
c - clothing
d - personel valuables
e - dentures
f - glasses
g - hearing aid
h - hospital property
i - purse/wallet
~~j - other~~

BREAKAGE

a - dentures
b - glasses
c - hospital property
d - other

OTHERS

a - visitor accident
b - incidents with lab
c - fire
d - unauthorized discharge
e - elopement
f - threats to hospital, staff, other
g - other

.../2

PATIENT MEDICATION ERROR

a - wrong patient
b - wrong drug

c - wrong amount

d - dose repeated
e - dose continued
f - dose omitted
g - wrong time
h - wrong route

INTRAVENOUS ERROR

a - I.V. rate incorrect
b - I.V. solution incorrect
c - I.V. solution incompatible
d - I.V. interstitial
e - other

REASONS

a - med card problem
b - policy not followed by Nursing Staff
c - policy not followed by Medical Staff
d - policy not followed by Pharmacy Staff
e - policy not followed by Other Staff
f - policy not followed by the patient
g - Unknown

INCIDENT REPORTED BY

1 - A.D.N.
2 - U.S.
3 - R.N.
4 - R.N.A.
5 - Other Staff
6 - Patient
7 - Visitor
8 - Other
9 - Student Nurse

March 1986

APPENDIX L

Incident Report Summary Forms

INCIDENT BREAKDOWN BY SPECIFIC TYPE

N. U.	PATIENT ACCIDENT								PATIENT INCIDENT							LOSS										BREAKAGE				OTHER							TOTAL
	a	b	c	d	e	f	g	h	a	b	c	d	e	f	g	a	b	c	d	e	f	g	h	i	j	a	b	c	d	a	b	c	d	e	f	g	

INCIDENT BREAKDOWN BY SPECIFIC TYPE

	N.U.	MEDICATION ERROR								I.V. ERROR					REASONS							INCIDENT REPORTED BY									TOTAL	
		a	b	c	d	e	f	g	h	a	b	c	d	e	a	b	c	d	e	f	g	1	2	3	4	5	6	7	8	9		